Evaluation of Healthy Kids, Healthy Communities

Cross-Site Report

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Transtria LLC

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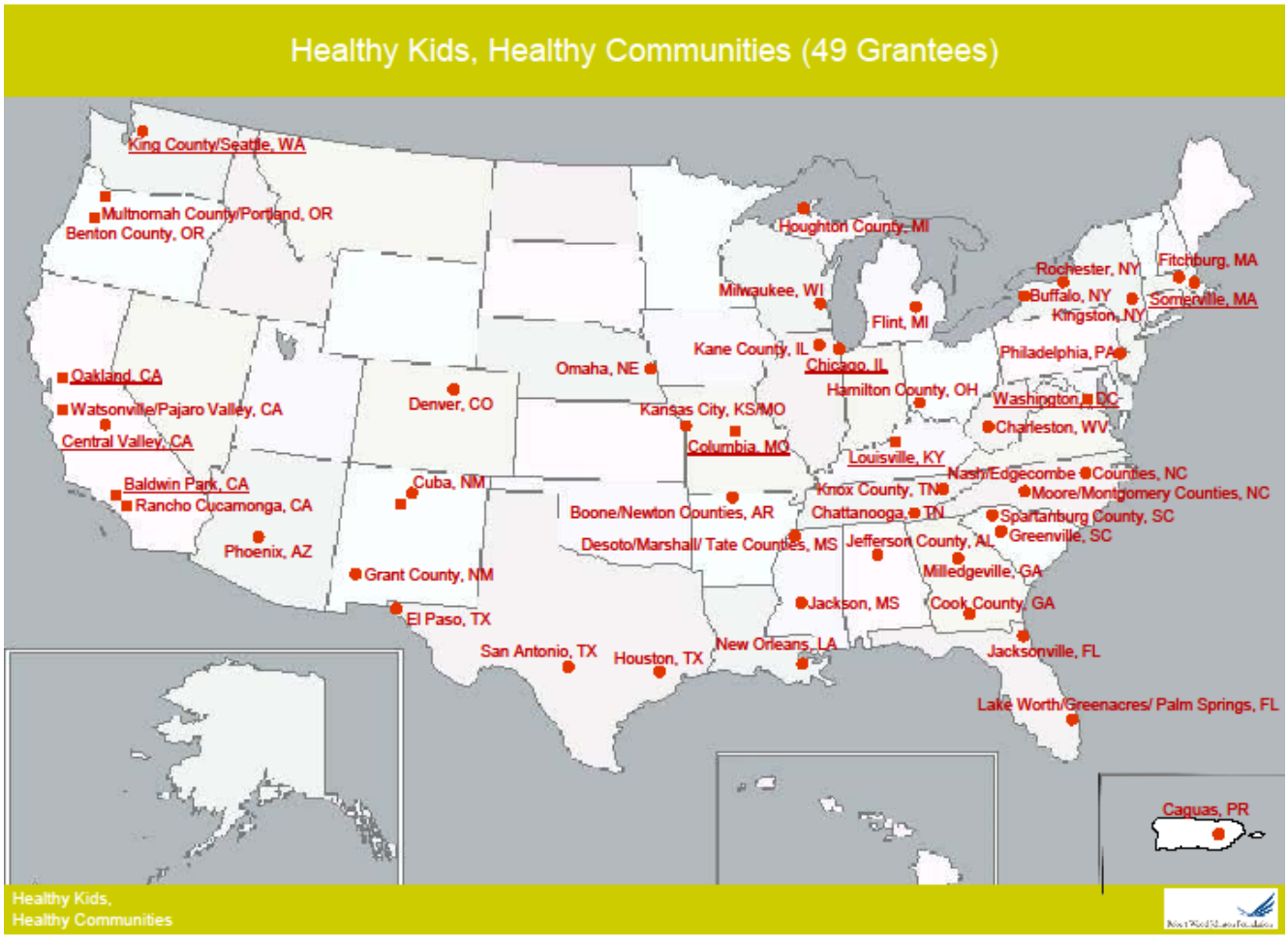
Background

Healthy Kids, Healthy Communities National Program

With the goal of preventing childhood obesity, the Healthy Kids, Healthy Communities (HKHC) national program, funded by the Robert Wood Johnson Foundation (RWJF), provided grants to 49 community partnerships across the United States (Figure 1). Healthy eating and active living policy, system, and environmental changes were implemented to support healthier communities for children and families. The program placed special emphasis on reaching children at highest risk for obesity on the basis of race, ethnicity, income, or geographic location.[1]

Project Officers from the HKHC National Program Office assisted community partnerships in creating and implementing annual workplans organized by goals, tactics, activities, and benchmarks. Through site visits and monthly conference calls, community partnerships also received guidance on developing and maintaining local partnerships, conducting assessments, implementing strategies, and disseminating and sustaining their local initiatives. Additional opportunities supplemented the one-on-one guidance from Project Officers, including peer engagement through annual conferences and a program website, communications training and support, and specialized technical assistance (e.g., health law and policy). For more about the national program and grantees, visit www.healthykidshealthycommunities.org.

Figure 1: Map of Healthy Kids, Healthy Communities Partnerships



Background

Evaluation of Healthy Kids, Healthy Communities

Transtria LLC and Washington University Institute for Public Health received funding from the Robert Wood Johnson Foundation to evaluate the HKHC national program. The purpose was to evaluate the HKHC community initiatives as well as to collaborate with the HKHC National Program Office (NPO) to provide coordinated technical assistance to the 49 community partnership sites. The evaluation team, representing staff from Transtria LLC (Transtria) and Washington University Institute for Public Health (WU IPH), had the following aims: 1) to coordinate data collection for the evaluation through the web-based project management system (HKHC Community Dashboard) and provide training and technical assistance for use of this system; 2) to guide data collection and analysis through use of the Assessment & Evaluation Toolkit; 3) to conduct a quantitative cross-site impact evaluation among a subset of community partnership sites; and 4) to conduct a qualitative cross-site process and impact evaluation among all 49 community partnership sites. These activities built on the complementary planning phase that the evaluation team worked on with RWJF funding, beginning on March 15, 2009.

The evaluation was intended to highlight successful plans, processes, and strategies for system, policy, and environmental changes to increase active living and healthy eating and identify challenges encountered or failed approaches, with a focus on children and their families in racial/ethnic and lower income populations with disproportionately high rates of childhood obesity. The evaluation team tracked community partnerships' workplans, processes, strategies, and results related to active living and healthy eating policy, system, and environmental changes as well as influences associated with partnership and community capacity and broader social determinants of health.

Reported "actions," or steps taken by community partnerships to advance their goals, tactics, activities, or benchmarks from their workplans, formed community progress reports that were tracked through the HKHC Community Dashboard. This website included other functions as well, such as social networking, progress reporting, and tools and resources to maintain a steady flow of users over time and increase peer engagement across communities. In addition to action reporting, evaluators collaborated with community partners to conduct individual and group interviews with partners and community representatives, environmental audits and direct observations in specific project areas (where applicable), and group model building sessions. Data from an online survey, photos, community annual reports, other reports on HKHC strategic efforts, and existing surveillance systems (e.g., U.S. census) supplemented information collected alongside the community partnerships.

The evaluation team received guidance from national advisors representing a wide range of expertise, including public health, urban design and planning, policy, food and nutrition, transportation, and parks and recreation. Advisors helped to ensure that the evaluation activities complemented related efforts occurring in the field; reviewed methods, measures, and findings; and provided direction on how to share what has been learned.

At the beginning, the evaluation team worked with the HKHC National Program Office and the HKHC community partnerships to develop a logic model for the overall initiative (see Grantee Products or visit http://www.transtria.com/hkhc.php). Based on this color-coded model, the team customized logic models for each of the 49 community partnerships (see appendices within the community case reports submitted as part of Grantee Products). The evaluation team also worked with partners (HKHC community partnership representatives, Evaluation Officers, Project Officers, an RWJF representative, and advisors from the national Evaluation Advisory Group) to identify priority healthy eating and active living system, policy, and environmental strategies for the cross-site evaluation. The final strategy recommendations included:

Priority Cross-Site Evaluation Strategies

Community

- Parks and recreation
- Corner stores
- Street design standards and improvements
- Farmer's markets

Childcare/After School

- Nutrition standards
- Physical activity standards

Other Strategies of Interest

- Joint use
- Safe Routes to School
- Zoning
- Comprehensive plans
- Grocery stores
- Nutrition assistance
- Gardens/ greenhouses

The cross-site strategies were evaluated through relevant methods (policy assessment, environmental audits, photos or videos, direct observation) and consistent measures, where feasible. Data collection capitalized on existing assessment efforts in place across all 49 HKHC community partnerships and new information collected on site visits by the evaluation team. Other methods (e.g., qualitative data from the HKHC Community Dashboard) and innovative methods (e.g., cost assessment, group model building) were intended to supplement these findings.

The evaluation team also collaborated with Daniel Gentry, PhD at Rush University on a cost assessment component of the evaluation that served as the foundation for a series of "Value Frameworks" (products will be refined with RWJF funds for dissemination of the evaluation findings). Representatives from the Social System Design Lab at Washington University in St. Louis (Peter Hovmand, PhD, Director) received a subcontract to support the group model building component of the evaluation (i.e., using system dynamics modeling). In addition to the cross-site findings presented in this report from group model building sessions, the evaluation team is developing "Systems Thinking in Communities" storybooks for each of the 49 community partnerships (through the RWJF funds for dissemination of the evaluation findings). Finally, group model building findings are also under analysis with a specific focus on food marketing and advertising in African American communities (through a subcontract with the African American Collaborative Obesity Research Network and the University of Pennsylvania).

Methods

Evaluation methods were designed to assess policy, system, and environmental changes as a result of the community partnerships' efforts to increase healthy eating and active living in order to reduce childhood obesity.

Performance Monitoring through the HKHC Community Dashboard (www.hkhcdashboard.org)

Performance monitoring is a method used to track progress on different goals and benchmarks as well as other related indicators of interest. The Dashboard tracked progress (i.e., "actions") on community partnerships' goals, tactics, activities, and benchmarks as well as other related indicators of interest (e.g., announcements, products or photos posted). The Dashboard also supported the following functions: project communications within community partnerships, social networking within and across community partnerships, progress monitoring by Project Officers from the HKHC National Program Office (NPO), data coding and analysis by Evaluation Officers from Transtria, program communications and announcements (e.g., "shout-outs"), tool and resource sharing, and data sharing and reporting. The Dashboard was designed collaboratively by representatives from Transtria, Washington University Institute of Public Health (WU IPH), the HKHC NPO, and Pyramid Communications.

The actions reported by community partnerships were coded by Evaluation Officers. The taxonomy for coding actions through the Dashboard consisted of 593 codes, such as healthy eating, active living, and obesity prevention strategies, including integrated strategies. For each action, the community partnerships were given the opportunity to provide a brief description, the entry date, funding sources, associated media, and the partnership's role (i.e., direct, indirect, or not attributable to the HKHC partnership). In turn, Evaluation Officers tagged each action for the types of *settings* or places where the action took place (e.g., school, community center, church), including *geographic types* (e.g., urban, suburban, rural, or a combination of these). Evaluation Officers also identified the *population*(s) involved in each action by *age* (e.g., 0-2 years, high school, adults) and *racial/ethnic* representation. Other *subpopulation* tags (i.e., immigrant, low income, physically disabled, uninsured) were applied to actions. Additional codes were applied for tagging *partners* by type (e.g., government agency, community-based organization, elected official, resident) or discipline (e.g., agriculture, urban planning). Types and counts of actions by community partnership and across community partnerships were produced.

Preliminary findings were summarized in action reports distributed to community partnerships at three six-month intervals over the course of the evaluation (see Grantee Products for three "Evaluation Profiles" for each of the 49 community partnerships).

Assessment and Evaluation Toolkit (A feature on the Dashboard)

The Assessment and Evaluation Toolkit provided assessment and evaluation tools, protocols, guides, manuals, and related resources to support local data collection and analysis efforts within community partnerships. Based on these resources, Evaluation Officers from Transtria provided technical assistance to community partnerships to: adapt tools and resources for local use, support development of new tools and resources where gaps exist, or recommend data collection and analysis approaches. The Toolkit was designed by Transtria staff, with input from representatives of RWJF, the HKHC NPO, WU IPH, and the HKHC Evaluation Advisory Group. Transtria and the HKHC National Program Office posted 393 toolkit items, HKHC community partnerships posted 219 toolkit items, and the remaining 409 items were posted as part of technical assistance responses to community partnerships. (Note: This did not include enhanced evaluation tools and resources.)

Enhanced Evaluation

The enhanced evaluation focused on the six cross-site strategies, including parks and play spaces, street design, farmers' markets, corner stores, child care physical activity standards, and child care nutrition standards, as well as two data collection methods, direct observation and environmental audits. Participation by community partnerships was optional. Evaluation Officers from Transtria trained local representatives to conduct environmental audits and/or direct observations for one or more of the six strategies. Evaluation Officers also provided technical support for data entry, cleaning, analysis, and summary; and community partnerships received a stipend to support local data collection efforts. The tools, protocols, and training resources for each of the six strategies were adapted or developed by Transtria staff, with input from representatives of RWJF, the HKHC NPO, and WU IPH (visit http://www.transtria.com/enhanced_evaluation_resources.php for tools, protocols, and training materials).

Environmental Audits

An environmental audit is an unobtrusive, systematic assessment of factors in the physical and social environment that can hinder or facilitate active living or healthy eating behaviors (e.g., grid-like street patterns, number and quality of food vendors). Audits document specific features of the environment or changes to the environment coinciding with intervention implementation.

Direct Observation

Direct observation records the use of environments by community members, such as the number of individuals, their selected characteristics (e.g., age, gender), and their behaviors (e.g., sedentary, walking, selection/purchase of fruits and vegetables), over a specified time period.

Evaluation Officers from Transtria worked with community partnerships to customize the evaluation plans to a particular design approach, including baseline and/or follow-up data collection activities with or without comparison sites. For instance, an environmental audit might assess factors affecting walkability before and after the addition of sidewalks or completion of a community trail while direct observation might assess walking in these environments before and/or after construction. Because direct observation methods require time (e.g., observations at multiple times per day on multiple days per week) and other special considerations (e.g., good weather conditions), the evaluation team helped each interested community partnership to design a plan for a meaningful approach. When feasible, Evaluation Officers encouraged community partnerships to use multiple auditors/observers to increase inter-rater reliability.

A total of 87 trainings were conducted by Transtria. Thirty-one HKHC community partnerships collected data resulting in a total of 41 environmental audits and 17 direct observations. After entering, cleaning, analyzing, and summarizing the data, Evaluation Officers provided a data report to each participating community partnership. Each participating community partnership received preliminary reports of their data from the enhanced evaluation activities (see appendices within the community case reports submitted as part of Grantee Products).

Individual and Group Interviews

Key informant interviews provided an opportunity for in-depth dialogue with individuals who have expertise, experience, or perspectives related to the community partnerships' activities. Key informants, or opinion leaders, often have important and unique information about a policy or program. Evaluation Officers conducted phone and in-person interviews with project staff, partners, or community representatives before, during, and after site visits. General topics included: how long the community partnership was in operation, why the partnership was established, what organizations, agencies, or coalitions served on the partnership, whether community members were involved in the partnership, major strengths/challenges of the partnership in meeting strategic goals, sources of leveraged funding, factors that contributed to securing other resources, and ways to sustain the partnership. Interview tools and protocols were adapted from previous evaluation efforts for the *Evaluation of Active Living by Design* by Transtria staff, with input from representatives of the HKHC NPO and WU IPH (see Grantee Products). Individual and group interviews were recorded, transcribed, and subsequently coded by theme (e.g., partnership development, policy assessment, strategy implementation challenges, sustainability efforts).

Policy and Cost Assessment

Policy assessment is a method used to review policies and political processes. Community partnerships involved their partners in these assessments to provide a foundation for understanding the dynamics at the organizational and community levels that influence policy-making processes (e.g., advocacy, policy enforcement) and resources (e.g., budget, personnel, facilities and equipment). The evaluation team examined key policy indicators, including: processes and means used to develop, implement, and enforce policies; roles and interests (e.g., population health, economic feasibility, environmental protection) of different partners in the policy process; relative power and influence of different groups in the process (e.g., community participation); structural factors influencing the policy process (e.g., systems, institutions); contextual factors influencing the policy process (e..g., political, economic, socio-cultural); decision-making processes (e.g., criteria for weighing policy options); and perceived or anticipated impacts on health (e.g., obesity prevention, active living, healthy eating), the environment (e.g., water quality, air quality), the economy (e.g., benefits, costs), and equity (e.g., resource distribution for racial and ethnic and lower income populations). In addition, the evaluation team captured social and cultural acceptability, practicality, and legal considerations related to policy initiatives, with a focus on the cross-site strategies.

Cost assessment is an approach to document initiative costs and sources of revenue to support those costs. Evaluators tracked costs and funding associated with the design, development, implementation, and enforcement of the six cross-site strategies, in particular. Cost elements included a wide range of expenses associated with people's time invested in different policy development, implementation, enforcement, evaluation, or communication activities (e.g., personnel wages, value of volunteer time); assets purchased or acquired (e.g., land use value, building use value, equipment); or other resources obtained or used (e.g., materials, supplies, travel reimbursement). Revenue elements included an array of funds and resources supporting strategy efforts, including: funds from RWJF, matching funds from other sources, new revenue generated through the strategy, in-kind resources, and other sources of revenue or capital (e.g., adopted expenses into existing community or organizational budgets). Many of these revenue elements were tracked in the HKHC Dashboard (i.e., the system developed to address Aim 1 from the original proposal) and the community partnerships' financial reports to RWJF.

Through the individual and group interviews and other available information, Evaluation Officers created strategy-specific cost and revenue frameworks, including common categories of cost measures

and sources of revenue for each strategy. The strategy cost and revenue frameworks will be further refined based on preliminary feedback from the HKHC NPO, the HKHC Evaluation Advisory Group, and HKHC community partnerships during a dissemination phase.

Partnership and Community Capacity Survey

Partnership and community capacity refers to the ability of communities to identify social and public health problems, develop collaborative approaches to address these problems, mobilize resources to intervene to create positive changes, and sustain these changes over time. The survey was designed to identify partnership, leadership, and community characteristics associated with the community partnerships' work. The survey was derived from three primary sources: 1) early work from the CDC Prevention Research Centers develop a 38-item partnership capacity survey[1]; 2) later work from the Prevention Research Centers to conduct reliability and validity testing on an expanded list of survey items with eight community-based initiatives as well as a national sample of both leaders and non-leaders of 291 community-based initiatives;[2] and 3) lessons learned from a survey developed and administered to the 25 *Active Living by Design* community partnerships based on the early work of the Prevention Research Centers.[3] Modeled after this earlier work, an 82-item partnership capacity survey solicited perspectives of members of 49 community partnerships on structure and function of the partnership. The survey questions assisted evaluators in identifying characteristics of each partnership, its leadership, and its relationship to the broader community.

Questions addressed respondents' understanding of the partnership in the following areas: partnership capacity and functioning, purpose of partnership, leadership, partnership structure, relationship with partners, partner capacity, political influence of partnership, and perceptions of community members. Participants completed the survey online and rated each item using a 4-point Likert-type scale (strongly agree to strongly disagree). Responses were used to reflect partnership structure (e.g., new partners, committees) and function (e.g., processes for decision making, leadership in the community). The partnership survey topics included the following: the partnership's goals are clearly defıned, partners have input into decisions made by the partnership, the leadership thinks it is important to involve the community, the partnership has access to enough space to conduct daily tasks, and the partnership faces opposition in the community it serves.

The survey was conducted in two phases: for leading sites, the survey was open between December 2012 and April 2013; secondary sites completed the survey between September 2013 and December 2013. The survey was translated into Spanish to increase respondent participation in predominantly Hispanic/Latino communities. See Partnership Capacity Survey in Grantee Products.

Analysis

To assess validity of the survey, evaluators used SPSS to perform factor analysis, using principal component analysis with Varimax with Kaiser Normalization (Eigenvalue >1). Evaluators identified 15 components or factors with a range of 1-11 items loading onto each factor, using a value of 0.4 as a minimum threshold for factor loadings for each latent construct (i.e., component or factor) in the rotated component matrix.

Survey data were imported into a database, where items were queried and grouped into the constructs identified through factor analysis. Responses to statements within each construct were summarized using weighted averages. Each site was evaluated individually and received an analysis summary. Evaluators excluded sites with ten or fewer respondents from individual site analyses but included them in the final cross-site analysis.

Group Model Building

The purpose of Group Model Building (GMB) sessions was to introduce systems thinking at the community level by identifying the essential parts of the system for each community partnership and how the system influences policy and environmental changes to promote healthy eating and active living and to prevent childhood obesity. To accomplish this goal, community partners and residents at each site participated in a group model building session and related discussions. The group model building exercises were designed by staff from Transtria and the Social System Design Lab at Washington University in St. Louis, Missouri. These exercises actively involved a wide range of participants in modeling complex systems and provided a way for different representatives (e.g., residents, elected officials, government agencies, community-based organizations, businesses, universities) to better understand the systems (i.e., dynamics and structures) in the community (see the *Healthy Kids, Healthy Communities Group Model Building Facilitation Handbook*, www.transtria.com/hkhc).

Behavior Over Time Graphs

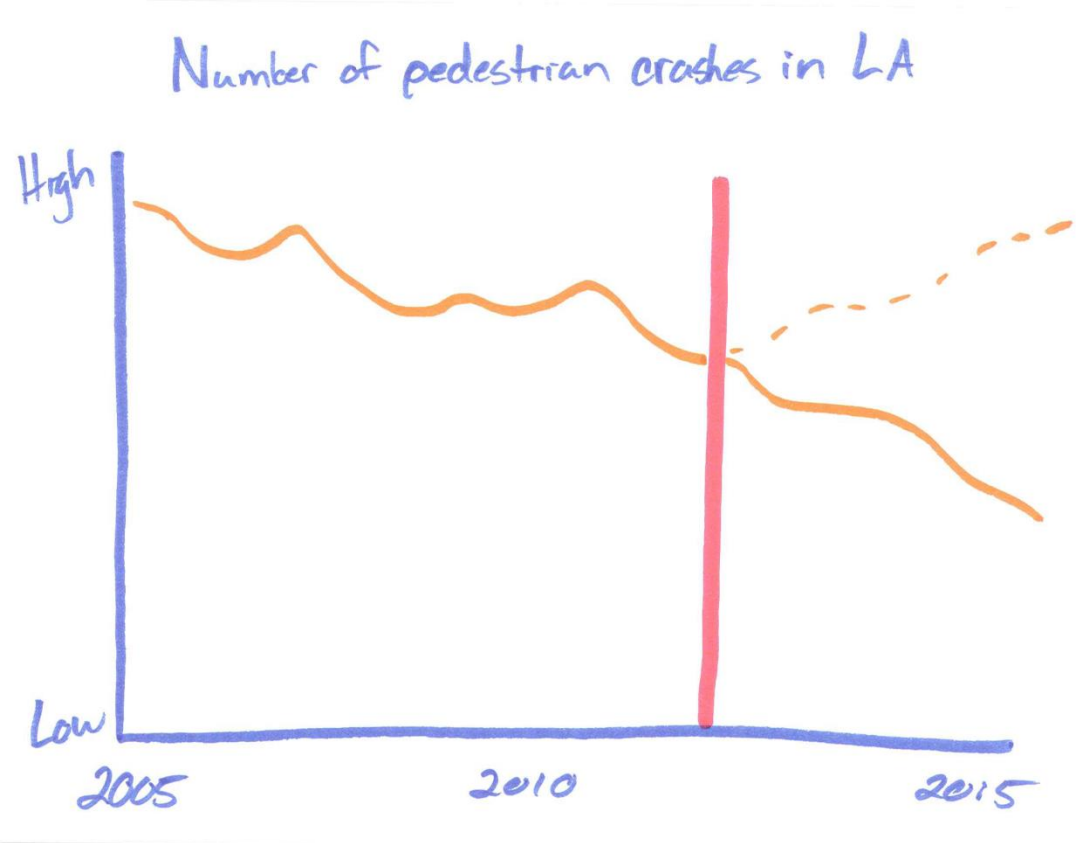
BOTGs were generated during the first part of the GMB sessions, which were facilitated by two trained evaluation staff and carried out in all 49 HKHC communities using a protocol (see Handbook cited above). One community partnership held two GMB sessions because of its large eight-county geographic catchment area; thus BOTGs from 50 GMB sessions were analyzed and described. Four GMB sessions involved English-Spanish translators, and BOTGs that emerged from these sessions were translated into English. Participants in the GMB sessions included key partners, community leaders, residents, and others engaged in or impacted by the policy, system, or environmental changes occurring in the community. Participation from a wide range of different partners was encouraged. These participants were identified and recruited by leaders of the community partnerships.

The facilitator of each GMB session began the BOTG exercise by stating the purpose of the exercise ("things that affect or are affected by policy, system and environmental changes in your community related to healthy eating, active living, and childhood obesity") and by demonstrating how to create a BOTG using a topic unrelated to the activities of the partnership (notably, the number of people receiving flu shots). Participants were instructed to create graphs with large titles, as well as a time frame on the x-axis (e.g., days, months, years), scale on the y-axis (numbers or descriptors, such as "low" to "high"), and their perception of how the variable has changed over time (see example in Figure 2). Graphs were to include (1) a historic trend from the past (any starting date or qualitative reference such as last year) to the present, and (2) a projected trend indicated by both a "hope" line (solid line depicting each participant's hope for what will happen) and fear line (dashed line depicting each participant's fear for what will happen). In addition, facilitators encouraged participants to restrict each graph to one idea and reminded them that the graphs represented their own perceptions of what has changed in the community, emphasizing that there were no right or wrong answers. Participants were allowed 15 minutes to create as many graphs as possible. Afterwards, participants were asked to share their favorite or most important BOTGs, one at a time.

Coding procedures

Upon completion of the GMB sessions, the BOTGs were compiled, coded, and analyzed. The general approach to analyzing BOTGs involved (1) sorting graphs into eleven broad domains and relevant categories and subcategories within these domains, (2) coding time frames and historic and projected trends, and (3) summarizing common trends.

Figure 2. Example of a Behavior Over Time Graph



Initially, all of the graphs (n=1,785) were printed and sorted into domains, categories, and subcategories. One research staff person sorted the graphs and a second person assessed whether s/he agreed with the categories. Investigators sought to classify graphs into groups such that the component variables were as homogenous in meaning as possible within a category (or subcategory where applicable). Graphs that contained ideas or variables that were unrelated to existing categories were coded as outliers (n=65, e.g., “Percentage of teens that can get their driver's license and do”). Pie graphs, graphs without time on the x-axis, ambiguous variables, or graphs containing multiple ideas were excluded (n=60), leaving 1,660 graphs that were coded. In 72 cases where the meaning of the variable or trend was ambiguous, transcripts from the GMB session were checked to ensure appropriate classification.

The time frames and trends of each BOTG were coded into a database using a protocol with decision rules, definitions of the 18 variables entered into the database, and trend codes for historic and projected trends. The protocol is available upon request. Briefly, there were 30 codes used to describe trends based on a combination of the trend’s *direction* (increasing, decreasing, stable) and *shape* (linear, reinforcing, balancing, or oscillating) for both single and complex (up to five sequences) trends. Examples of trends are shown in Table 1.

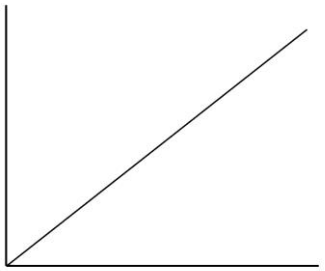
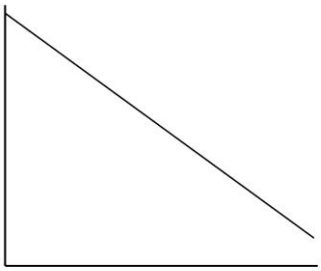
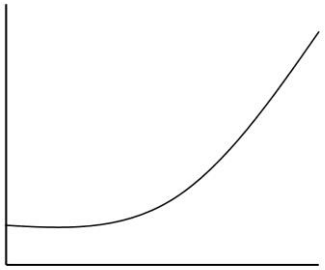
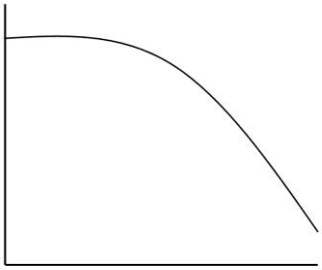
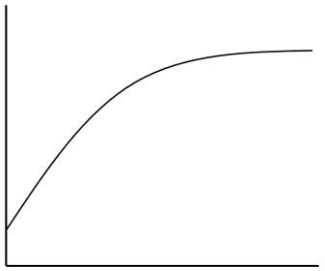
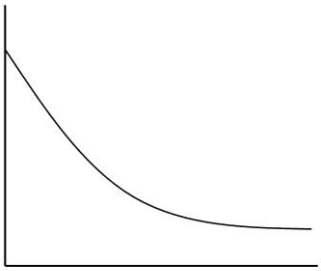
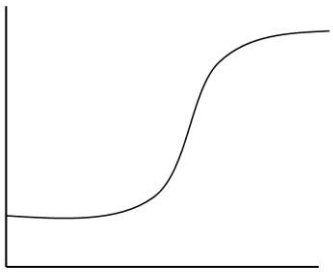
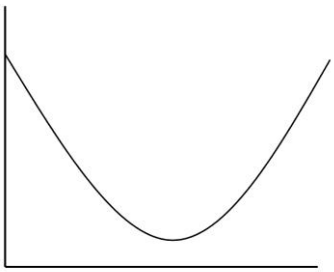
Within the smallest unit of classification (category or subcategory), graphs were sorted by their historical trend within common time frames. For graphs showing similar trends (e.g., reinforcing increasing), research staff identified a time frame that overlapped most graphs or used the mid-point of baseline years for graphs that spanned many years. The original time frame written on the graph was entered into the database (hereafter referred to as the “written timeframe”), along with the time frame

that was perceived as common across graphs with similar trends (hereafter referred to as the “assigned timeframe”). The purpose of assigning a common time frame was to aid in pooling graphs with similar trends for descriptive analyses and presentation. In cases where participants wrote text (e.g., “Past” and “Current”) on the x-axis instead of actual years, coders assigned the year 2000 as past and 2012 as present or time frames of graphs with similar trends. If time frames for graphs with common trends differed significantly (e.g., 1950-2012, 2002-2012), then the original time frames were recorded in the database and a common time frame was not assigned. In some cases, the latter part of a complex trend (e.g., balancing increasing for a graph that was S-shaped) for a single graph was grouped with other graphs depicting simpler trends (e.g., balancing increasing) that occurred during the same time period. In these instances, the assigned time frame was the one which overlapped the simpler trends, and then an alternate trend code was assigned for the more complex trend that corresponded with the complete time frame on the written graph (e.g., reinforcing increasing to balancing increasing). Altogether, judgment was required when assigning time frames.

Generally, historic and projected trends were coded separately; however, in the following special cases, hope lines were incorporated into the codes of historic trends. (1) In cases of linear historic trends, hope lines were used to assess whether a trend should be coded as reinforcing or balancing rather than linear, since linear trends are not useful for subsequent systems modeling nor do they represent how phenomena behave in nature/society. Increasing linear historic trends with increasing linear hope lines that were of greater slope were coded as reinforcing increasing trends, while increasing historic trends with increasing linear hope lines that were of lesser slope or with a decreasing linear hope line were coded as balancing increasing. Similar, but reciprocal, codes were applied for linear decreasing historic trends. (2) Hope lines for non-linear historic trends were used when the direction of the latter part of the trend line suggested a balancing or reinforcing pattern to enable an outlying graph (i.e., trends represented by only one graph in a group) to be grouped with others in the category rather than be treated as an outlier. For all of these graphs in which hope lines were used for coding historic trends, an alternative trend code was recorded to preserve the original trend.

Other important decision rules were applied as well. If the graph axes were in opposite direction in meaning from the title (ranging from “high” to “low,” rather than “low” to “high”), then a trend code was assigned that corresponded to the inverse trend to enable grouping with trends in the same category. Likewise, if the direction of a trend was in the inverse direction from others in its category because of the variable used (e.g., distance to nearest park in group of graphs showing number of parks within a neighborhood), then the inverse trend for the outlying graph was coded. In addition, if a graph with an oscillating trend could be lumped with other graph trends by ignoring oscillations, then an alternate trend code of oscillating was assigned. If not, or if oscillations appeared intentional, then the trend was coded as oscillating. Finally, in general, in cases where more than one code seemed reasonable, a code was assigned that would enable grouping with other BOTGs, and then assigned an alternate code. Alternate codes were applied to 540 graphs, of which 340 were attributed to recoding linear trends as balancing or reinforcing.

Table 1. Examples of Behavior Over Time Graph (BOTG) Trends

Type	Direction	
	Increasing	Decreasing
Linear		
Reinforcing		
Balancing		
Complex (>1 trend)		
	Reinforcing Increase to Balancing Increase	Balancing Decrease to Reinforcing Increase

Inter-rater reliability

Inter-rater reliability was assessed between two trained research staff for the purposes of refining the coding protocol and decision rules. Agreement was assessed on historic trends for 39 graphs (community gardens, and access to fast-food/take-out) and on historic, projected, and alternate trend codes for 82 graphs (school gardens, cost of healthy food, walkability, bikability, livability). Overall agreement was 92 percent for the variables that were coded. The research staff discussed any differences and enhanced the protocol where necessary.

Analysis

Analyses were solely descriptive. In order to aid in describing trends among graphs falling within the same category, the following actions were taken: (1) a new variable was created to characterize the "ending" trend of complex trends for purposes of data reduction and pooling with simpler trends and to enable describing whether participants in general perceived a trend to be worsening, stabilizing, or improving; (2) a new variable was created to differentiate variables that were theoretically positively (e.g., access to healthy foods) or negatively (e.g., screen time) associated with health (either based on evidence or theory), including active living and healthy eating. Hope lines were used to verify the intended direction of the variable. If the direction could be not determined, then the direction was coded as unknown. Less than five percent of graphs were coded as having an unknown hypothesized relationship with health. With this information, classes of trends were created to assess whether participants generally perceived trends to be in a favorable direction or not. The following classes were applied to variables positively related to health:

- Reinforcing increasing trend: any complex trend ending in reinforcing increasing or a single reinforcing increasing trend; represents a favorable trend.
- Linear increasing trend: linear/oscillating increasing trend; represents a favorable trend.
- Balancing increasing trend: any complex or single trend ending in balancing increasing; represents a generally favorable trend that is stabilizing potentially because the variable reached a saturation point.
- Stable: an oscillating or linear flat slope; represents a trend that is in equilibrium.
- Balancing decreasing trend: any complex trend ending in balancing decreasing or a single balancing decreasing trend; represents a favorable trend.
- Linear or exponential decreasing trends: any complex trend ending in reinforcing decreasing, a single reinforcing decreasing trend, or a linear/oscillating decreasing trend; represents an unfavorable trend.

In addition to analyzing frequencies of trends, trends within specific subcategories were presented graphically to illustrate the utility of examining differences in trends across communities. The trends of three subcategories were selected for presentation including (1) cost of healthy foods/produce; (2) active transportation to school; and (3) farmers' markets. They were selected among 16 subcategories with 20 or more BOTGs. They were selected because they represented healthy eating and active living topics, represented strategies or behaviors targeted by the HKHC initiative, and depicted variables with low or high variability in the number or types of perceived trends across participants.

Causal Loop Diagrams (CLDs)

CLDs were generated during the second part of the GMB sessions (see Handbook). Again, CLDs from all 50 GMB sessions were analyzed and described. From the range of variables identified in the BOTG exercise, facilitators selected approximately nine to twelve variables to use as "seed" variables for the CLD exercise. These variables were written on white board paper posted to a wall prior to the sessions, so that participants were able to make modifications to anything written on the paper during the sessions (e.g., change to a variable name, addition of new variables).

In reference to the same purpose statement ("things that affect or are affected by policy, system and environmental changes in your community related to healthy eating, active living, and childhood obesity"), participants were instructed to identify causal connections among the "seed" variables or to generate new variables to be added to the white board indicating causal relationships. During these sessions, the facilitators inserted appropriate notation for the causal relationships (i.e., arrows), illustrating the direction of the causal relationships. Likewise, each arrow had a polarity (i.e., a plus or minus sign) to show that the two variables changed in the same direction (i.e., plus sign, both increase or both decrease) or in the opposite direction (i.e., minus sign, as one increases, the other decreases, or vice versa). This notation was described to participants during the sessions gradually as it was introduced. Simple feedback loops were also identified and explained to participants as they emerged during the sessions. A feedback loop connects two or more variables in a causal sequence that "feeds back" to the original variable.

Participants were asked to take turns identifying new causal relationships or feedback loops for approximately 45 to 60 minutes during the session. Their stories associated with the causal relationships identified were recorded and transcribed for the analysis to add further context and clarification to the causal relationships.

Coding procedures

After completion of the GMB sessions, the initial CLDs were entered into Vensim software and presented back to community representatives for validation. Next, each CLD was expanded to reflect the range of variables and ideas generated through the BOTG and CLD exercises. In addition, feedback loops associated with each community partnerships' primary strategies (i.e., partnership and community capacity building as well as healthy eating and active living) were extracted from the overall CLD. At the same time, variables from all 50 CLDs were independently coded into five main categories: healthy eating policies and environments, active living policies and environments, partnership and community capacity building, social determinants of health, and health and health behaviors.

Analysis

All variables from the CLDs were entered into a database according to the five main categories in order to identify common variables across communities. Variables represented in at least 20% of the community partnerships were included in the synthesized causal loop diagram based on the common structures of the feedback loops identified in the CLD for each community partnership.

Photos and Videos

Digital photographs or videos portrayed the condition of the facilities or environments and the impact of the healthy eating or active living policy or environment interventions on the environment. Community partnerships' staff provided tours for Evaluation Officers from Transtria for intervention sites. Photos and videos were used to supplement and validate findings from the qualitative data collected (e.g., images of environment changes).

Surveillance Data & GIS Mapping

With respect to surveillance data and GIS mapping methods, the evaluation team collected secondary data for all 49 community partnerships on relevant policy and environmental indicators using a systematic approach, with the intention of triangulating this data with the other quantitative and qualitative data collected as part of the evaluation methods. The team also worked collaboratively with Dr. Christopher Fulcher and his team (Center for Applied Research and Environmental Sciences, CARES) to link the other evaluation efforts to the Childhood Obesity Prevention GIS on-line tools and resources. Some Evaluation Officers were trained to provide ongoing training and technical assistance to community partnerships on coordinated use of this system in conjunction with other complementary evaluation efforts.

Record Review

The Evaluation Officers also reviewed the community partnerships' proposals and budgets, annual and final narrative reports, annual and final financial reports, and any other reports or materials that were shared by the HKHC NPO or the community partnerships themselves.

Data Management, Quality & Analysis

Access Database

An Access database was created to store and code the multiple data sources (e.g., Dashboard Actions, interview data, narrative reports, budgets, and matching funds information) for analysis. Some of the key elements of the database included:

i) *Community Partnership*: Each Community Partnership profile contained information about the demographics for the partnership including total population, racial and ethnic breakdown, and poverty rate.
ii) *Subpopulations*: Within each partnership, strategies were often targeted to more specific populations, either larger or smaller than the community partnership. Each targeted population was entered as a "subpopulation" and key information about the population was reported, including total population, racial and ethnic breakdown, and poverty rate.
iii) *Revenue*: Each source of revenue generated for the partnership, both cash and in-kind, were reported, including HKHC budgets and expenditures, matching funds leveraged, and other funding leveraged as a result of HKHC (e.g., Community Transformation Grants).
iv) *Media*: All media events captured by the partnership were entered by media type (e.g., newspaper, TV, radio, website) and by strategy (e.g., corner stores, farmers' markets, general partnership).
v) *Assessments*: Any assessments conducted by the community partnerships were documented, including the methods (e.g., environmental audits, direct observations, surveys, interviews), strategy (e.g., farmers' markets, parks and play spaces), and youth and resident involvement in these activities.
vi) *Partners*: All partners involved with the community partnership were entered in the database. Partners were broken into core partners, the organizations or individuals directly responsible for carrying out the everyday activities of the partnership, or the network of partners (i.e., the organizations or individuals supporting the project needs). Other key information was documented about the partners, including the partners' type (e.g., government, foundation, business,

community-based organizations) and disciplines (e.g., healthcare, agriculture, parks, transportation).

vii) *Policy, Practice, and Environmental Settings (PpE)*: PpE changes occurred within a particular setting (e.g., farmers' markets, parks) and the specific setting location was documented along with the zip code tabulation area, which was used to assign the reach information to the setting and the PpE.

viii) *Policy, Practice, and Environmental Changes*: PpE changes were entered into the database within a setting. Key information was reported for the PpE changes, including grant year implemented, duration, type of PpE change, strategy and setting tags, and reach, implementation, and dose indicators (see findings related to community partnerships' populations and cross-site strategies for more information on reach, implementation, and dose).

Configural Frequency Analysis (CFA)

For the supplement to be published in the *Journal of Public Health Management and Practice*, CFA will be used to elicit and identify relationships between categorical data from the Access database. CFA is a statistical method for analyzing the frequency distributions in large (3 or more dimensions) contingency tables that focuses on identifying patterns that either appear more frequently or less frequently than expected.[4, 5] Analyses identify clusters of resource levels and trends in a case-based approach as opposed to a variable-based approach in order to examine communities that stood out with respect to the entire set of 49 communities. The analytic strength in CFA comes from providing a rigorous and replicable method for identifying community patterns, defined as either types (appearing more frequently than expected according to a base statistical model) or anti-types (appearing less frequently than expected). The base model is a generalized linear model to predict frequency distributions from categorical variables. A base statistical model that predicts the frequency distribution in a large contingency table identifies a set of variables that are associated through a linear expression. CFA identifies the deviations from the expected frequency distribution in the base model, and identifies specific patterns of dichotomous variables or configurations representing either types or antitypes. The CFA analyses are tested in R (www.r-project.org).

Findings

Community Partnerships

The 49 community partnership sites represented a total of 26,688,235 residents. Compared to the United States' total population, the community partnerships' populations had higher percentages of residents who spoke languages other than English. In addition, both the overall community partnerships' populations and the subpopulations had higher rates of individuals below the Federal Poverty Level as compared to the United States' total population (see Table 2, Table 3 for a breakdown by community partnership, and Table 4 for a breakdown by subpopulations).

Table 2: Community Partnerships' and United States' Non-English Speaking and Poverty Populations

	Speaking a Language Other than English (%)	Below Federal Poverty Level (%)
Subpopulations	21.5	26.3
Community Partnerships	25.4	19.9
United States	20.3	14.3

Compared to the United States racial and ethnic demographics, the community partnerships' populations represented a higher percentage of African American, American Indian/Native Alaskan, "Other race", and Hispanic or Latino residents. Community partnerships worked in several sub-populations to implement specific policy, practice, and environmental changes in addition to the overall community partnership population. For example, Louisville, Kentucky worked on city-wide and specific neighborhood (e.g., Smoketown, California) initiatives. The subpopulations frequently had different demographics than the overall partnership population. Compared to the community partnerships' demographics, the subpopulations represented higher percentages of African American, American Indian/Native Alaskan, Native Hawaiian/Pacific Islander, and Hispanic or Latino residents (see Figure 3 for these comparisons, Table 5 for a breakdown by community partnership, and Table 6 for a breakdown by subpopulations).

Figure 3: Community Partnerships' and United States' Racial and Ethnic Populations (%)

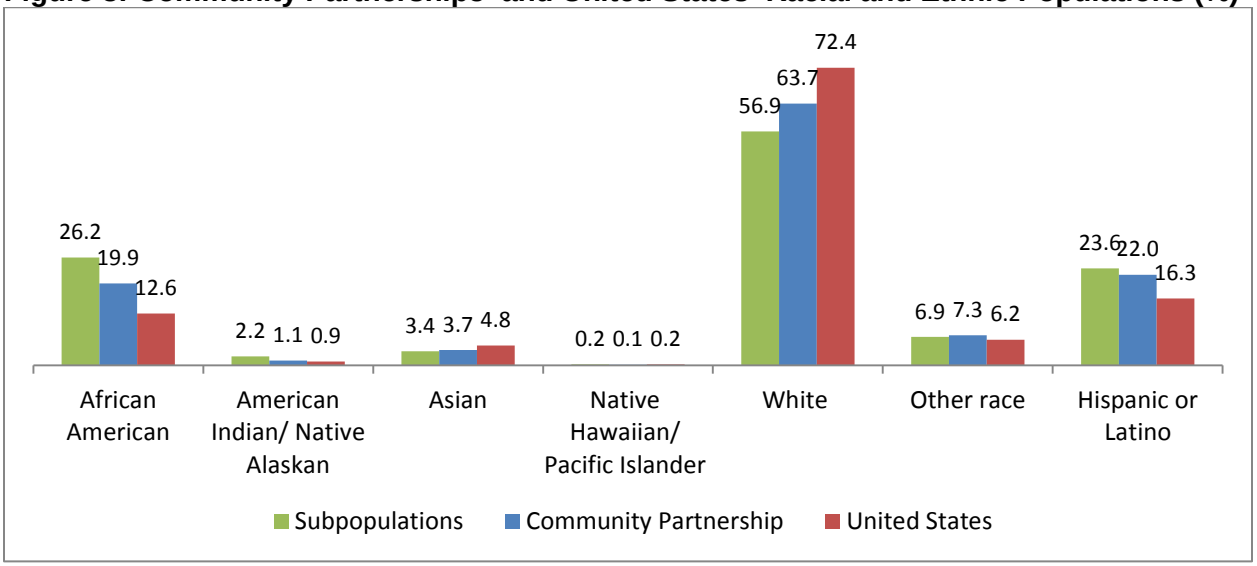


Table 3: Language and Poverty Rates for HKHC Community Partnerships

Community Partnership	State	Speaking a Language Other than English	Below Federal Poverty Level
Baldwin Park	California	82.9%	16%
Benton County	Oregon	11.2%	21%
Boone/Newton Counties	Arizona	2.3%	16.9%
Buffalo	New York	14.2%	29.9%
Caguas	Puerto Rico	89.6%	37.1%
Central Valley	California	42.7%	20.8%
Charleston	West Virginia	4%	16.4%
Chattanooga	Tennessee	7.7%	22.9%
Chicago	Illinois	35.5%	21.4%
Columbia	Missouri	10.6%	22.9%
Cook County	Georgia	7.3%	23%
Cuba	New Mexico	61%	28.7%
Denver	Colorado	27.6%	18.8%
Desoto/Marshall /Tate Counties	Mississippi	5%	13%
El Paso	Texas	72.2%	23.3%
Fitchburg	Massachusetts	24%	19%
Flint	Michigan	3.2%	38.2%
Grant County	New Mexico	33.8%	16.6%
Greenville	South Carolina	8%	18.6%
Hamilton County	Ohio	6.6%	15.9%
Houghton County	Michigan	7.2%	22.8%
Houston	Texas	45.8%	21.5%
Jackson	Mississippi	79.4%	0.1%
Jacksonville	Florida	13.1%	15.2%
Jefferson County	Alabama	5.8%	16.2%
Kane County	Illinois	30.7%	10.1%
Kansas City	Missouri	15%	19.4%
Kingston	New York	17.1%	16.5%
Knox County	Tennessee	5.6%	13.7%
Lake Worth/Greenacres/Palm Springs	Florida	50.1%	21.9%
Louisville	Kentucky	7.8%	17.5%
Milledgeville	Georgia	5.1%	43.3%
Milwaukee	Wisconsin	19.1%	27%

Table 3: Language and Poverty Rates for HKHC Community Partnerships (continued)

Community Partnership	State	Speaking a Language Other than English	Below Federal Poverty Level
Moore/Montgomery Counties	North Carolina	9.1%	16.1%
Nash/Edgecombe Counties	Oregon	6.1%	18.4%
New Orleans	North Carolina	9.7%	25.7%
Oakland	Louisiana	39.6%	19.6%
Omaha	California	13.9%	15.5%
Philadelphia	Nebraska	21%	25.6%
Phoenix	Pennsylvania	36.8%	20.3%
Portland/Multnomah County	Arizona	19.5%	16.5%
Rancho Cucamonga	California	32.5%	5.5%
Rochester	New York	18%	31.1%
San Antonio	Texas	46.1%	19.2%
Seattle/King County	Washington	24.8%	10.5%
Somerville	Massachusetts	32.3%	14.9%
Spartanburg County	South Carolina	8.6%	16.2%
Washington DC	District of Columbia	14.5%	18.9%
Watsonville/Pajaro Valley	California	59.5%	14.8%

Table 4: Language and Poverty Rates for HKHC Subpopulations

Community Partnership	State	Number of Subpopulations	Speaking a Language Other than English	Below Federal Poverty Level
Baldwin Park	California	2	56.8%	16.7%
Benton County	Oregon	10	7.9%	16.0%
Boone and Newton Counties	Arizona	5	1.7%	22.1%
Buffalo	New York	5	19.7%	35.7%
Caguas	Puerto Rico	7	89.6%	37.1%
Central Valley	California	8	43.6%	20.7%
Charleston	West Virginia	46	1.8%	17.8%
Chattanooga	Tennessee	4	6.6%	30.8%
Chicago	Illinois	6	33.8%	24.0%
Columbia	Missouri	7	8.3%	20.8%
Cook County	Georgia	10	7.8%	25.1%
Cuba	New Mexico	3	70.3%	25.2%
Denver	Colorado	13	N/A	26.9%
Desoto, Marshall and Tate Counties	Mississippi	12	5.1%	20.5%
El Paso	Texas	4	83.0%	37.2%
Fitchburg	Massachusetts	9	20.8%	33.9%
Flint	Michigan	2	3.5%	36.6%
Grant County	New Mexico	9	35.7%	17.9%
Greenville	South Carolina	2	16.4%	21.8%
Hamilton County	Ohio	40	7.0%	21.4%
Houghton County	Michigan	5	9.0%	30.0%
Houston	Texas	10	0.0%	32.0%
Jackson	Mississippi	2	0.0%	29.7%
Jacksonville	Florida	3	8.1%	24.9%
Jefferson County	Alabama	13	5.2%	32.1%
Kane County	Illinois	26	17.7%	6.6%
Kansas City	Missouri	8	25.6%	27.7%
Kingston	New York	16	6.4%	40.5%
Knox County	Tennessee	9	5.9%	24.2%
Lake Worth, Greenacres and Palm Springs	Florida	13	47.9%	27.7%
Louisville	Kentucky	15	3.8%	43.8%
Milledgeville	Georgia	2	4.4%	32.2%
Milwaukee	Wisconsin	14	26.9%	34.2%
Moore and Montgomery Counties	North Carolina	13	10.2%	17.1%

Table 4: Language and Poverty Rates for HKHC Subpopulations (continued)

Community Partnership	State	Number of Subpopulations	Speaking a Language Other than English	Below Federal Poverty Level
Nash and Edgecombe Counties	North Carolina	35	4.7%	21.2%
New Orleans	Louisiana	5	10.7%	24.9%
Oakland	California	12	49.0%	24.6%
Omaha	Nebraska	20	12.6%	47.6%
Philadelphia	Pennsylvania	34	19.7%	34.1%
Phoenix	Arizona	5	0.0%	41.6%
Portland/Multnomah County	Oregon	5	23.8%	22.8%
Rancho Cucamonga	California	2	0.0%	5.2%
Rochester	New York	7	21.1%	32.8%
San Antonio	Texas	15	57.7%	36.1%
King County/Seattle	Washington	10	55.2%	18.7%
Somerville	Massachusetts	3	0.0%	15.0%
Spartanburg County	South Carolina	5	8.8%	17.1%
Washington, DC	District of Columbia	1	14.5%	18.2%
Watsonville/Pajaro Valley	California	3	63.6%	18.3%

Table 5: Population Demographics for HKHC Community Partnerships

Community Partnership	State	Population	African American	American Indian/ Native Alaskan	Asian	Native Hawaiian/ Pacific Islander	White	Other race	Hispanic or Latino
Baldwin Park	California	75,390	1.2%	0.9%	14.2%	0.1%	43.9%	35.9%	80.1%
Benton County	Oregon	85,579	0.9%	0.7%	5.2%	0.2%	87.1%	2.3%	6.4%
Boone/Newton Counties	Arizona	45,233	0.2%	0.8%	0.4%	0.1%	96.4%	0.3%	1.8%
Buffalo	New York	261,310	38.6%	0.8%%	3.2%	0%	50.4%	3.9%	10.5%
Caguas	Puerto Rico	142,893	11%	0.1%	0%	0%	76.1%	8.5%	99.1%
Central Valley	California	3,971,659	5%	1.5%	7.4%	0.3%	57.8%	23.2%	48.6%
Charleston	West Virginia	51,400	15.5%	0.2%	2.3%	0%	78.4%	0.1%	1.4%
Chattanooga	Tennessee	167,674	34.9%	0.4%	2%	0.1%	58%	2.8%	5.5%
Chicago	Illinois	2,695,598	32.9%	0.5%	5.5%	0%	45%	13.4%	28.9%
Columbia	Missouri	108,500	11.3%	0.3%	5.2%	0.1%	79%	1.1%	3.4%
Cook County	Georgia	17,212	27.3%	0.2%	0.7%	0%	67%	3.4%	5.9%
Cuba	New Mexico	731	0.5%	24.6%	0.8%	0%	48.6%	19.3%	45.8%
Denver	Colorado	600,158	10.2%	1.4%	3.4%	0.1%	68.9%	11.9%	31.8%
Desoto/Marshall /Tate Counties	Mississippi	227,282	27.1%	0.3%	0.1%	0.1%	67.9%	2.4%	4.3%
El Paso	Texas	649,121	3.4%	0.7%	1.2%	0.1%	80.8%	11%	80.7%
Fitchburg	Massachusetts	40,318	5.1%	0.3%	3.6%	0%	78.2%	9.1%	21.6%
Flint	Michigan	102,434	56.6%	0.5%	0.5%	0%	37.4%	1.1%	10.5%
Grant County	New Mexico	29,514	0.9%	1.4%	0.1%	0.1%	84.9%	9.6%	48.3%
Greenville	South Carolina	58,409	30%	0.3%	1.4%	0.1%	64%	2.5%	5.9%
Hamilton County	Ohio	802,374	25.7%	0.2%	2%	0.1%	68.8%	1.1%	2.6%
Houghton County	Michigan	36,628	0.5%	0.6%	2.9%	0%	94.5%	0.2%	1.1%
Houston	Texas	2,099,451	23.7%	0.7%	6%	0.1%	50.5%	15.7%	43.8%
Jackson	Mississippi	173,514	0.4%	0.1%	0.4%	0%	18.4%	0.8%	1.6%
Jacksonville	Florida	821,784	30.7%	0.4%	4.3%	0.1%	59.4%	2.2%	7.7%
Jefferson County	Alabama	658,466	42%	0.3%	1.4%	0%	53%	2.2%	3.9%
Kane County	Illinois	515,269	5.7%	0.6%	3.5%	0%	74.8%	13%	30.7%

Table 5: Population Demographics for HKHC Community Partnerships (continued)

Community Partnership	State	Population	African American	American Indian/ Native Alaskan	Asian	Native Hawaiian/ Pacific Islander	White	Other race	Hispanic or Latino
Kansas City	Missouri	605,573	29.4%	0.6%	2.5%	0.2%	57.5%	6.7%	14.3%
Kingston	New York	23,893	14.6%	0.5%	1.8%	0%	73.2%	4.9%	13.4%
Knox County	Tennessee	432,226	8.8%	0.3%	1.9%	0.1%	85.6%	1.5%	3.5%
Lake Worth/Greenacres/ Palm Springs	Florida	91,411	17.1%	2.5%	2%	0.1%	65.5%	9%	41.3%
Louisville	Kentucky	597,337	22.9%	0.3%	2.2%	0.1%	70.6%	1.8%	4.5%
Milledgeville	Georgia	17,715	42.2%	0.1%	1.7%	0.1%	53.4%	0.9%	2.3%
Milwaukee	Wisconsin	594,833	40%	0.8%	3.5%	0%	44.8%	7.5%	17.3%
Moore/Montgomery Counties	North Carolina	116,045	14.7%	0.7%	1.1%	0.1%	77.6%	4.2%	7.9%
Nash/Edgecombe Counties	Oregon	152,392	44.7%	0.6%	0.6%	0%	49.6%	3.2%	5.3%
New Orleans	North Carolina	343,829	60.2%	0.3%	2.9%	0%	33%	1.9%	5.2%
Oakland	Louisiana	390,724	28%	0.8%	16.8%	0.6%	64.5%	13.7%	25.4%
Omaha	California	408,958	13.7%	0.8%	2.4%	0.1%	73.1%	6.9%	13.1%
Philadelphia	Nebraska	1,526,006	43.4%	0.5%	6.3%	0%	41%	5.9%	12.3%
Phoenix	Pennsylvania	1,445,632	6.5%	2.2%	3.2%	0.2%	65.9%	18.5%	40.8%
Portland/Multnomah County	Arizona	735,334	5.6%	1.1%	6.5%	0.5%	76.5%	5.1%	10.9%
Rancho Cucamonga	California	165,269	9.2%	0.7%	10.4%	0.3%	62%	12%	34.9%
Rochester	New York	210,565	41.7%	0.5%	3.1%	0%	43.7%	6.5%	16.4%
San Antonio	Texas	1,327,407	6.9%	0.9%	2.4%	0.1%	72.6%	13.7%	63.2%
Seattle/King County	Washington	1,931,249	6.2%	0.8%	14.6%	0.8%	68.7%	3.9%	8.9%
Somerville	Massachusetts	75,754	6.8%	0.3%	8.7%	0%	73.9%	6.7%	10.6%
Spartanburg County	South Carolina	284,307	20.6%	0.3%	2%	0%	72.3%	3.1%	5.9%
Washington DC		601,723	50.7%	0.3%	3.5%	0.1%	38.5%	4.1%	9.1%
Watsonville/Pajaro Valley	California	152,152	0.4%	0.6%	3.8%	0.1%	70.2%	21%	81.4%

Table 6: Subpopulation Demographics (Means) for HKHC Community Partnerships

Community Partnership	State	Number of Sub-populations	Average Sub-population	African American	American Indian/ Native Alaskan	Asian	Native Hawaiian/ Pacific Islander	White	Other race	Hispanic or Latino
Baldwin Park	California	2	4,947,809	4.8%	0.8%	14.4%	0.2%	43.0%	33.3%	63.2%
Benton County	Oregon	10	27,140	0.7%	1.0%	2.1%	0.1%	90.0%	2.8%	8.1%
Boone and Newton Counties	Arizona	5	17,937	0.2%	0.7%	0.5%	0.0%	96.4%	0.2%	1.8%
Buffalo	New York	5	4,070,266	46.9%	12.5%	3.2%	4.0%	41.6%	2.8%	9.4%
Caguas	Puerto Rico	7	358	11.0%	0.1%	0.0%	0.0%	76.1%	8.5%	99.1%
Central Valley	California	8	496,457	4.8%	1.8%	5.8%	0.3%	58.3%	24.1%	50.1%
Charleston	West Virginia	46	61,801	10.3%	0.1%	0.9%	0.0%	84.9%	0.3%	2.9%
Chattanooga	Tennessee	4	5,404	59.4%	0.7%	0.0%	0.0%	33.4%	4.6%	6.6%
Chicago	Illinois	6	55,307	29.4%	0.2%	1.7%	0.0%	41.0%	7.0%	37.2%
Columbia	Missouri	7	37,875	16.0%	0.4%	4.0%	0.1%	74.2%	1.2%	3.4%
Cook County	Georgia	10	3,025	33.3%	0.3%	0.7%	0.0%	60.7%	3.5%	6.1%
Cuba	New Mexico	3	45,608	0.8%	60.7%	0.5%	0.0%	29.8%	5.0%	19.1%
Denver	Colorado	13	29,517	4.5%	1.4%	3.0%	0.1%	49.3%	6.4%	57.8%
Desoto, Marshall and Tate Counties	Mississippi	12	97,275	35.8%	0.2%	0.9%	0.0%	59.4%	2.2%	4.3%
El Paso	Texas	4	37,323	1.3%	0.6%	0.9%	0.0%	78.7%	16.9%	88.3%
Fitchburg	Massachusetts	9	107,281	5.5%	0.1%	4.1%	0.0%	69.7%	9.1%	28.1%
Flint	Michigan	2	25,722	68.1%	2.0%	1.1%	0.1%	31.3%	1.2%	3.5%
Grant County	New Mexico	9	9,418	0.6%	1.6%	0.4%	0.0%	78.1%	16.6%	50.6%
Greenville	South Carolina	2	232,760	18.1%	0.4%	1.6%	0.1%	67.2%	10.4%	16.7%
Hamilton County	Ohio	40	43,729	34.9%	0.6%	2.4%	0.2%	63.7%	0.8%	2.7%
Houghton County	Michigan	5	10,030	0.7%	0.7%	3.3%	0.0%	93.9%	0.3%	1.6%
Houston	Texas	10	25,005	35.5%	0.2	0.5%	0.0%	27.8%	8.3%	60.2%
Jackson	Mississippi	2	21,715	86.9%	0.0%	0.4%	0.4%	11.9%	0.2%	1.6%
Jacksonville	Florida	3	336,963	67.4%	0.3%	2.2%	0.1%	27.9%	1.2%	5.0%
Jefferson County	Alabama	13	30,995	60.5%	0.4%	0.9%	0.0%	35.5%	0.8%	3.7%
Kane County	Illinois	26	32,418	4.7%	0.2%	3.3%	0.0%	79.1%	10.6%	19.5%

Table 6: Subpopulation Demographics (Means) for HKHC Community Partnerships (continued)

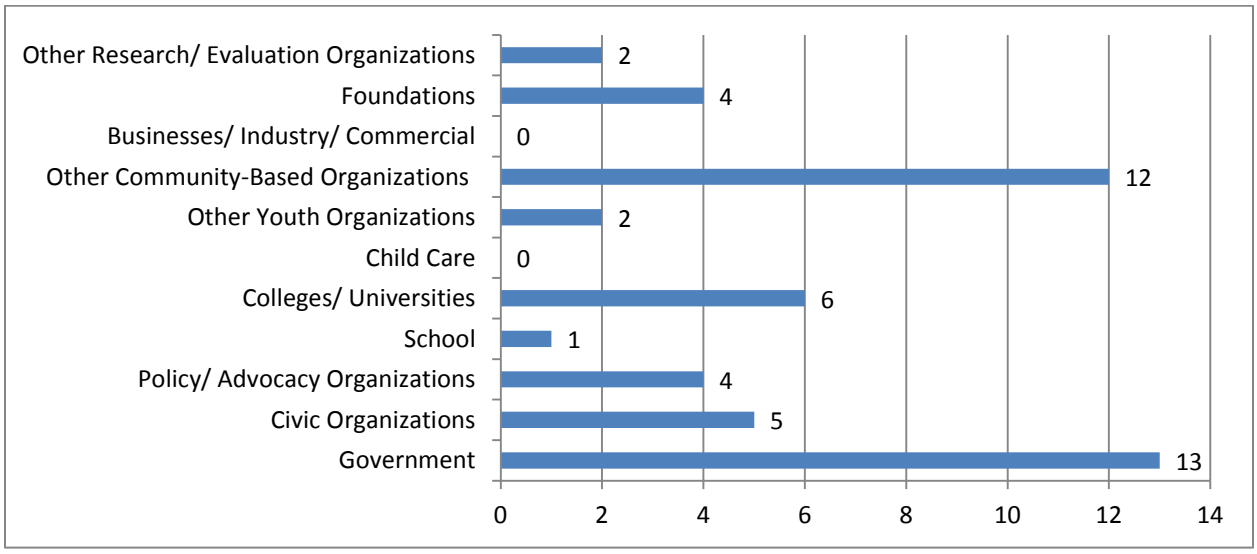
Community Partnership	State	Number of Sub-populations	Average Sub-population	African American	American Indian/ Native Alaskan	Asian	Native Hawaiian/ Pacific Islander	White	Other race	Hispanic or Latino
Kansas City	Missouri	8	116,932	23.9%	0.6%	3.4%	0.1%	60.7%	8.7%	26.1%
Kingston	New York	16	14,400	13.7%	0.7%	2.8%	0.0%	69.0%	3.3%	11.2%
Knox County	Tennessee	9	33,595	9.6%	0.2%	1.8%	0.0%	86.1%	1.0%	3.0%
Lake Worth, Greenacres and Palm Springs	Florida	13	34,975	16.1%	0.8%	2.2%	0.0%	71.8%	6.6%	40.0%
Louisville	Kentucky	15	10,029	35.8%	1.1%	1.9%	0.0%	63.0%	1.7%	3.3%
Milledgeville	Georgia	2	45,178	42.0%	0.2%	1.4%	0.0%	55.0%	0.7%	2.1%
Milwaukee	Wisconsin	14	19,752	49.3%	0.8%	3.1%	0.1%	33.2%	10.1%	23.4%
Moore/Montgomery Counties	North Carolina	13	14,531	21.6%	1.1%	1.0%	0.1%	68.9%	5.8%	13.3%
Nash/Edgecombe Counties	North Carolina	35	8,258	52.4%	2.4%	1.7%	0.0%	43.7%	2.3%	3.3%
New Orleans	Louisiana	5	254,479	57.3%	0.8%	2.7%	0.1%	38.3%	2.7%	6.7%
Oakland	California	12	29,679	29.1%	0.7%	14.0%	0.6%	37.2%	10.4%	28.6%
Omaha	Nebraska	20	37,538	26.9%	1.0%	4.4%	0.2%	52.9%	4.5%	12.9%
Philadelphia	Pennsylvania	34	36,864	48.2%	0.3%	5.7%	0.0%	38.0%	5.6%	12.1%
Phoenix	Arizona	5	72,002	7.7%	2.0%	1.3%	0.1%	67.3%	19.8%	76.6%
Portland/ Multnomah County	Oregon	5	132,029	11.1%	1.0%	6.2%	1.0%	68.0%	7.0%	14.5%
Rancho Cucamonga	California	2	48,971	9.3%	1.0%	12.5%	0.2%	60.1%	10.4%	37.0%
Rochester	New York	7	188,766	48.4%	0.3%	1.5%	0.0%	37.6%	7.4%	19.3%
San Antonio	Texas	15	79,973	4.8%	0.5%	1.2%	0.0%	59.3%	16.0%	75.6%
King County/Seattle	Washington	10	68,778	39.0%	0.9%	19.2%	1.3%	34.5%	2.2%	6.0%
Somerville	Massachusetts	3	24,350	6.2%	0.3%	9.9%	0.0%	76.0%	5.6%	10.0%
Spartanburg County	South Carolina	5	13,159	39.1%	0.3%	2.8%	0.0%	57.3%	1.7%	3.9%
Washington, DC		1	46,393	51.9%	0.3%	3.5%	0.1%	38.9%	3.4%	9.0%
Watsonville/Pajaro Valley	California	3	77,475	0.4%	0.6%	3.5%	0.1%	68.0%	23.7%	69.0%

Partners

Lead Agency

Only one community partnership experienced a change in their lead agency, while 18 community partnerships had transitions in their Project Director and/or Project Coordinator. A total of 11 different types of organizations served as lead agency for the 49 community partnerships (see Figure 4). Among them, most were government agencies (n=13) followed closely by community-based organizations (n=12). No commercial businesses (e.g., food retailer) or child care agencies served as lead agency for any of the community partnerships. Only one community partnership was led by a school or school district. Two community partnerships were led by research and evaluation organizations (e.g., public health institute) and another two were served by youth organizations (e.g., youth recreation center). Academic institutions (i.e., colleges, universities) served as lead agency for six of the community partnerships. Civic organizations (n=5), policy and advocacy organizations (n=4), and foundations (n=4) comprised the remaining lead agency organizations.

Figure 4: Types of Organizations Serving as Lead Agency



Partner Organizations

A diversity of partners participated in each of the HKHC community partnerships. Organizations involved with the community partnerships were identified as either network or core partners. Network partners were typically involved on specific healthy eating and active living strategies; core partners served a more comprehensive role across strategies, often providing support to network partners. Across the 49 sites, a total of 1,415 partners engaged in the HKHC initiative from 15 different types of organizations. The number of total partners ranged from 52 (Charleston, WV) to 13 (Washington, DC; Boone and Newton Counties, AR; and Oakland, CA) among individual communities. The mean, median, and mode number of partners (29) was the same across the community partnerships.

Sixty-nine percent of partners (n=972) were classified as network partners and the remaining 31% were core partners (n=444). Denver, CO had the highest number of network partners (n=43) and Boone and Newton Counties, AR had the lowest (n=5). The average number of network partners across all community partnerships was 20 (mean). The number of core partners ranged from 22 (Jefferson County, AL) to 3 (Kane County, IL and Kansas City, MO) across all community partnerships. The most commonly reported number of core partners across all community partnerships was seven.

Figure 5 depicts the distribution of partners across 15 organizational types. Other community-based agencies, including faith-based, represented the largest number of partner types (n=377, 27%) followed by government agencies (n=358, 25%). Partner representation was lacking from both youth or peer leadership groups and child care agencies (n=0). Only three partners originated from foundations and served as lead agencies. Although no commercial businesses served as community partnership lead agencies, they comprised 10% of partnership types (n=143). The organization types including community members and residents (n=99, 7%), civic organizations (n=90, 6%), academic institutions (n=94, 7%), and schools (n=84, 6%) were fairly well represented. Elected officials (n=45, 3%), policy and advocacy agencies (n=58, 4%), and unaffiliated volunteers (n=27, 2%) were represented to a lesser extent across the community partnerships. See Table 7 for a list of partner types by community partnership.

Figure 5: Community Partners by Organization Type (n=1,415)

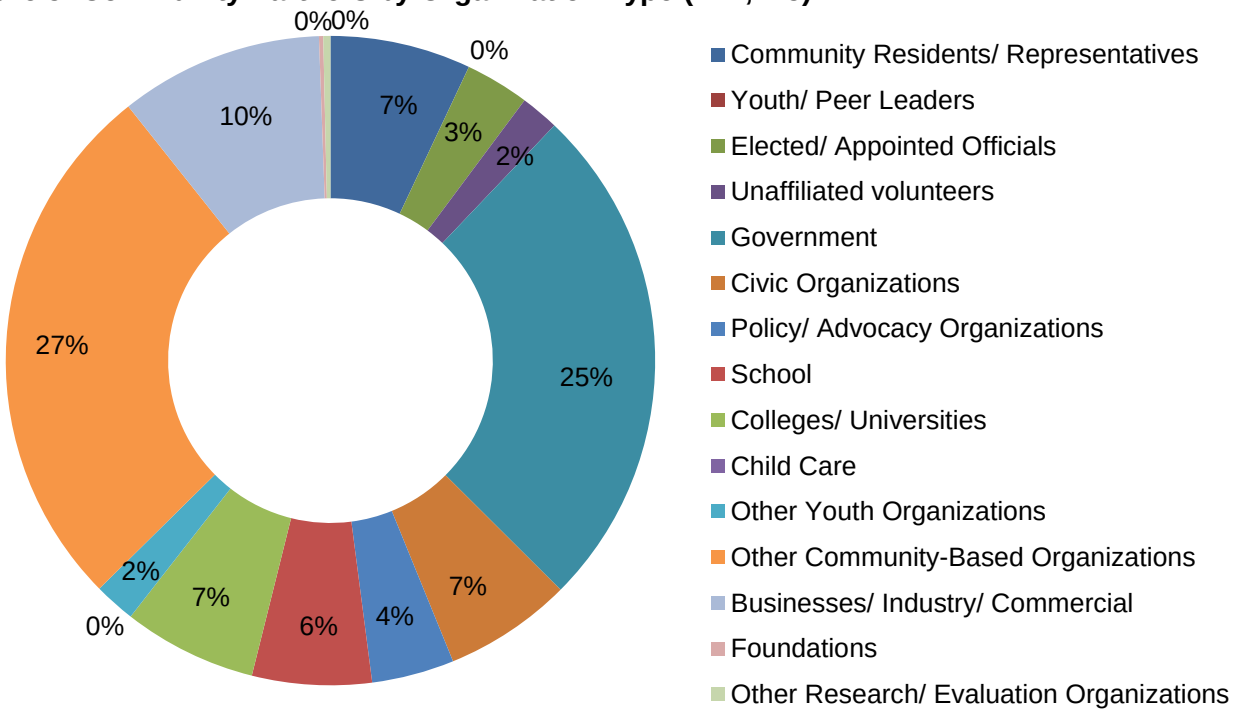


Table 7: Partner Types by Community Partnership

Community Partnership	Total	Network Partners	Core Partners	Community Residents	Youth/ Peer Leaders	Elected/ Appointed Officials	Unaffiliated volunteers	Government	Civic Organizations	Policy/ Advocacy Organizations	School	Colleges/ Universities	Child Care	Youth Organizations	Community-Based Organizations	Businesses/ Industry/ Commercial	Foundations	Research/ Evaluation Organizations
Baldwin Park, CA	15	10	5	1	0	1	0	2	2	1	1	0	0	0	5	2	0	0
Benton County, OR	29	16	13	1	0	0	0	8	0	1	1	2	0	0	16	0	0	0
Boone and Newton Counties, AR	13	5	8	1	0	1	0	7	1	0	1	0	0	0	1	1	0	0
Buffalo, NY	15	9	6	2	0	0	1	5	1	0	2	1	0	0	2	0	1	0
Caguas, PR	34	28	6	1	0	1	0	20	0	0	1	3	0	0	5	3	0	0
Central Valley, CA	37	21	16	3	0	0	0	10	3	2	7	1	0	0	11	0	0	0
Charleston, WV	52	33	19	1	0	2	0	9	4	2	1	3	0	0	24	6	0	0
Chattanooga, TN	35	22	13	1	0	2	3	6	1	1	0	2	0	6	10	3	0	0
Chicago, IL	38	33	5	4	0	2	4	7	1	1	1	3	0	0	9	4	0	1
Columbia, MO	46	30	17	6	0	3	1	11	1	0	3	2	0	1	12	5	0	1
Cook County, GA	27	15	12	0	0	1	0	5	5	0	3	2	0	0	4	7	0	0
Cuba, NM	22	17	5	2	0	1	2	4	1	0	2	2	0	1	4	3	0	0
Denver	50	43	7	7	0	2	0	15	1	4	0	2	0	0	11	8	0	0
Desoto, Marshall and Tate Counties, MS	36	20	16	2	0	0	0	12	1	3	2	3	0	1	6	5	0	0
El Paso, TX	22	10	12	1	0	0	0	8	1	2	2	2	0	0	5	1	0	0
Fitchburg, MA	24	14	10	1	0	0	0	10	0	0	1	1	0	0	6	5	0	0
Flint, MI	26	19	7	3	0	0	0	6	2	3	2	2	0	2	6	0	0	0
Grant County, NM	29	12	17	1	0	0	0	9	0	1	2	4	0	0	10	2	0	0
Greenville, SC	37	29	8	8	0	0	0	5	1	1	1	3	0	0	13	5	0	0
Hamilton County, OH	15	11	4	0	0	1	1	3	1	0	2	1	0	1	5	0	0	0
Houghton County, MI	18	14	4	3	0	1	0	8	0	1	1	2	0	0	2	0	0	0
Houston, TX	29	20	9	2	0	1	1	6	0	1	3	3	0	0	9	2	0	1
Jackson, MS	15	11	4	3	0	0	0	4	0	0	1	3	0	0	4	0	0	0
Jacksonville, FL	25	20	5	2	0	0	1	5	2	3	1	2	0	0	5	4	0	0
Jefferson County, AL	29	7	22	1	0	2	0	4	3	2	4	2	0	0	9	2	0	0

Table 7: Partner Types by Community Partnership (continued)

Community Partnership	Total	Network Partners	Core Partners	Community Residents	Youth/ Peer Leaders	Elected/ Appointed Officials	Unaffiliated volunteers	Government	Civic Organizations	Policy/ Advocacy Organizations	School	Colleges/ Universities	Child Care	Youth Organizations	Community-Based Organizations	Businesses/ Industry/ Commercial	Foundations	Research/ Evaluation Organizations
Kane County, IL	27	24	3	2	0	1	2	5	3	1	1	1	0	0	8	3	0	0
Kansas City, MO/KS	36	33	3	1	0	1	1	1	3	3	2	2	0	1	13	8	0	0
Kingston, NY	43	36	7	2	0	0	0	10	3	0	4	2	0	1	15	6	0	0
Knox County, TN	23	12	11	5	0	0	1	5	0	0	2	2	0	0	5	3	0	0
Lake Worth, Greenacres and Palm Springs, FL	38	28	10	1	0	1	1	17	3	2	1	1	0	0	7	3	1	0
Louisville, KY	34	27	7	0	0	0	1	6	7	0	1	3	0	1	3	10	0	0
Milledgeville, GA	22	9	13	2	0	1	0	6	0	0	2	2	0	0	4	4	1	0
Milwaukee, WI	34	21	13	2	0	0	1	2	4	2	1	5	0	0	10	7	0	0
Moore and Montgomery Counties, NC	26	16	10	0	0	3	0	7	7	3	2	1	0	1	2	0	0	0
Nash and Edgecombe Counties, NC	35	30	5	2	0	1	0	10	4	2	2	5	0	2	3	2	0	2
New Orleans, LA	28	22	6	3	0	1	1	7	0	0	1	3	0	4	6	2	0	0
Oakland, CA	13	8	5	1	0	0	0	2	0	0	3	1	0	1	4	1	0	0
Omaha, NE	26	8	18	0	0	1	0	12	2	1	1	2	0	1	5	1	0	0
Philadelphia, PA	14	8	6	3	0	0	2	2	1	1	0	1	0	0	4	0	0	0
Phoenix, AZ	27	20	7	0	0	2	1	8	1	3	1	0	0	0	12	0	0	0
Portland/Multnomah County, OR	30	15	15	2	0	1	0	11	1	1	0	0	0	1	11	2	0	0
Rancho Cucamonga, CA	26	19	7	0	0	4	0	3	3	0	3	1	0	0	9	3	0	0
Rochester, NY	40	28	12	4	0	0	0	10	5	4	4	3	0	1	6	3	0	0
San Antonio, TX	33	20	13	8	0	0	0	9	0	0	3	2	0	0	5	6	0	0
King County/Seattle, WA	37	35	2	0	0	0	0	5	3	1	2	2	0	0	20	4	0	0
Somerville	46	39	7	2	0	4	2	17	2	0	1	1	0	1	13	3	0	0
Spartanburg, County, SC	17	13	4	1	0	0	0	4	1	2	1	3	0	0	4	1	0	0
Washington, DC	13	9	4	1	0	0	0	3	2	1	0	0	0	0	4	2	0	0
Watsonville/Pajaro Valley, CA	29	23	6	0	0	3	0	7	3	2	1	0	0	2	10	1	0	0

Assessment

A total of 616 assessments were completed across all HKHC sites. About half (n=320, 52%) of all assessments were conducted to benefit active living, while the other half (n=296, 48%) were directed toward healthy eating. Each site completed an average of slightly more than six healthy eating assessments, with 1 site completing a maximum of 24 assessments and 4 sites completing only 1. Among all active living assessments, an average of six and a half assessments was conducted per site. One site completed a maximum of 23 assessments, while another site completed only 1 assessment. The methods used for assessments were categorized into eleven different types: environmental audit, direct observation, focus group, mapping, questionnaire/survey, interview, community meeting/discussion forum, charrette, secondary data analysis, policy analysis, and other method. Among the 320 assessments completed for the active living strategy, the environmental audit method was most commonly used (n=115, 36%). Administration of questionnaires/surveys was the most frequently used method (n=84, 28%) among the 296 healthy living assessments.

Youth were involved in data collection and/or analysis for 24 (8%) of healthy eating assessments across 15 sites and 36 (11%) of active living assessments across 23 sites. Of the 49 sites, Watsonville/Pajaro Valley conducted the highest number (n=4, 36%) of healthy eating assessments for which youth were involved. Among the active living assessments, Fitchburg incorporated youth into their assessment work more than any other site, with 6 of their 17 (35%) assessments involving youth. Community residents assisted with 15 healthy eating (5%) and 25 (8%) active living assessments. Knox County had involved community residents in the most assessments with 4 (50%) healthy living assessments and 4 (100%) active living assessments involving youth. Youth and community residents participated in assessments benefiting a variety of strategies, but most commonly worked in the following: corner stores, parks and play spaces, active transportation, general active living, and general healthy living.

At times, individuals involved in the assessments were given formal training in the assessment method.

Community partnerships disseminated formal products describing the results for some of the assessments. Dissemination products were noted for 173 (58%) healthy eating assessments, representing 42 sites, and 191 (60%) active living assessments, representing 45 sites. Products were most common for parks and play spaces, active living, general healthy eating, and general active living strategies, with at least 50 products disseminated for each.

See Figured 6 and 7 for the total number of assessments by method for active living and healthy eating, respectively.

Figure 6: Total Number of Assessments by Methods for Active Living Strategies (n=320)

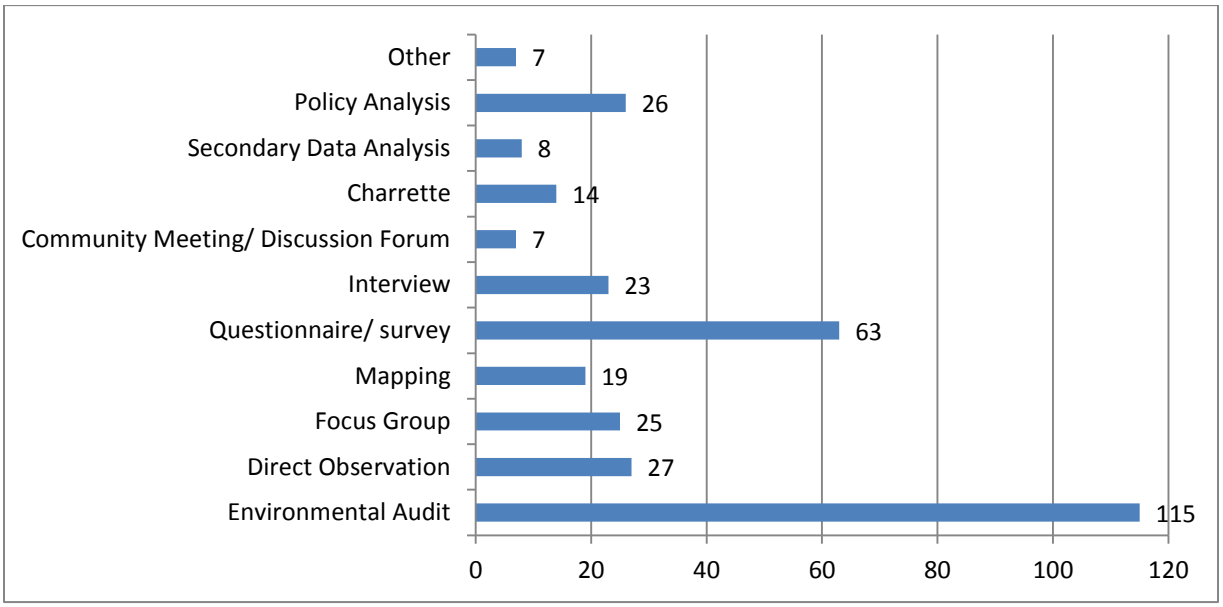
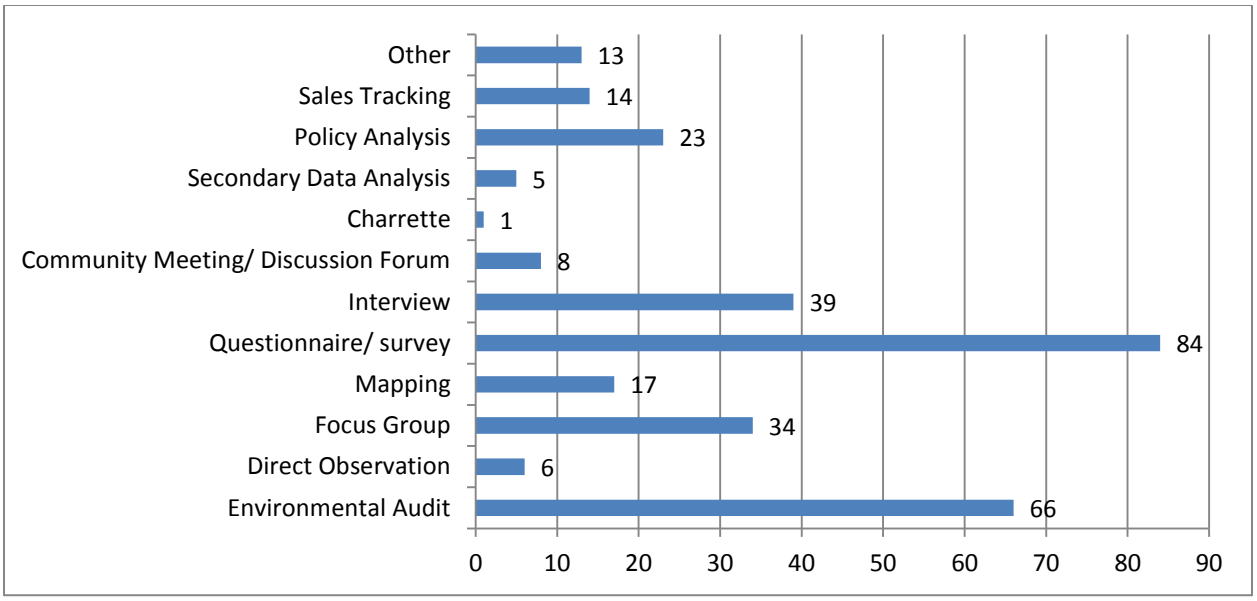


Figure 7: Total Number of Assessments by Methods for Healthy Eating Strategies (n=296)



Each assessment was further categorized by at least one cross-site strategy. Many of the assessments were classified under general active living (n=119, 19%) or general healthy eating strategies (n=137, 22%). Assessments pertaining to active transportation (n=102, 17%) and parks and play spaces (n=86, 13%) were conducted more commonly than assessments for other strategies. The trails strategy had the fewest number of assessments. No assessments were conducted for the food pantry/community kitchen, or fairgrounds/events strategies. See Table 8 for assessments by strategy and method.

Table 8: Assessments by Strategy by Method (n=661)

Strategy	Total Number of Assessments	Number of CPs	Environmental Audit	Direct Observation	Focus Group	Mapping	Questionnaire/ survey	Interview	Community Meeting/ Discussion Forum	Charrette	Secondary Data Analysis	Policy Analysis	Sales Tracking	Other
Childcare Nutrition Standards	33	12	8	1	3	1	11	3	0	0	1	4	0	1
Childcare Physical Activity Standards	28	9	8	2	2	1	7	3	0	0	0	10	0	0
Parks and Play Spaces	86	28	38	11	7	5	16	6	1	0	1	3	0	0
Corner Stores	42	19	14	0	1	3	19	4	0	0	1	0	0	0
Active Transportation	102	33	51	10	3	9	16	5	0	0	1	3	0	3
Farmers' Markets	41	19	11	0	3	0	18	4	0	0	0	2	2	1
Community urban farms/gardens/greenhouses	23	11	1	0	2	6	7	2	0	0	0	3	0	2
Grocery stores	18	10	3	0		2	10	3	0	0	0	0	0	0
Trails	6	4	5	0	1		0		0	0	0	0	0	0
Restaurants	12	4	4	0		1	6	1	0	0	0	0	0	0
Food pantry/community kitchen	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fairgrounds/events	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General active living	119	33	23	3	17	8	26	11	8	1	3	17	0	2
General healthy eating	137	38	20	4	16	8	39	13	8	1	5	15	1	7
General partnership	7	7	0	0	0	0	1	2	0	0	0	1	0	3
Other	7	5	3	0	0	1	1	2	0	0	0	0	0	0

Media

A total of 1,642 media products were generated across all sites for HKHC, referencing multiple topics or strategies for a total of 2,644 media categorizations (see Table 9). Media was categorized as one or more of the following: newspaper, website, billboard, TV, radio, social media, and other communication. Using the total number of categorizations for media (n=2,644), the majority of media were covered by a newspaper (n=1369, 56%) or website (n=616, 25%). For media topics, general partnership information had the most media (n=522, or 20%), while the childcare physical activity standards strategy had the fewest (n=8, < 1%). Active transportation, general active living, and general health eating topics also had high numbers of media, with at least 444 products per strategy.

Table 9: Media Type by Strategy (n=2,644)

Strategy	Total Media	Newspaper	Website	Billboard	TV	Radio	Social media	Other Communications
Childcare Nutrition Standards	31	21	6	0	4	0	0	0
Childcare Physical Activity Standards	8	5	2	0	1	0	0	0
Parks and Play Spaces	116	71	20	2	14	7	0	2
Corner Stores	16	6	5	0	4	1	0	0
Active Transportation	456	261	89	2	60	30	7	7
Farmers' Markets	170	100	37	3	17	8	3	2
Community urban farms/gardens/greenhouses	249	129	59	0	34	16	6	5
Grocery stores	24	10	3	1	6	3	0	1
Trails	96	69	16	0	8	3	0	0
Restaurants	16	9	4	0	3	0	0	0
Food pantry/community kitchen	11	6	3	0	0	0	0	2
Fairgrounds/events	24	13	4	1	2	3	1	0
General active living	461	207	118	4	79	33	10	10
General healthy eating	444	211	112	2	68	32	7	12
General partnership	522	251	138	1	83	34	8	7

Across all sites, an average of 33 media products was reported per site. Columbia reported the highest number (n=213, 3%) of media products, and Central Valley had substantially fewer media (n=2, < 1%). Somerville, Philadelphia, and San Antonio did not report any media products (see Table 10).

Table 10: Media Type by Community Partnership (n=1,642)

Community Partnership	State	Total Number of Media Generated	Newspaper	Website	Billboard	TV	Radio	Social media	Other communications
Baldwin Park	California	6	3	0	0	3	0	0	0
Benton County	Oregon	15	11	2	2	0	0	0	0
Boone and Newton Counties	Arkansas	106	83	9	0	4	7	3	0
Buffalo	New York	74	29	23	0	12	10	0	0
Caguas	Puerto Rico	51	9	10	0	18	12	2	0
Central Valley	California	2	0	1	0	1	0	0	0
Charleston	West Virginia	85	41	5	0	28	11	0	0
Chattanooga	Tennessee	32	14	6	0	7	4	0	1
Chicago	Illinois	4	2	1	0	1	0	0	0
Columbia	Missouri	213	158	43	0	4	6	0	2
Cook County	Georgia	32	18	6	0	3	5	0	0
Cuba	New Mexico	12	11	1	0	0	0	0	0
Denver	Colorado	19	5	7	1	3	1	0	2
Desoto, Marshall and Tate Counties	Mississippi	134	114	13	1	5	0	0	1
El Paso	Texas	7	3	3	0	1	0	0	0
Fitchburg	Massachusetts	52	29	6	0	8	6	3	0
Flint	Michigan	6	2	0	0	2	2	0	0
Grant County	New Mexico	33	22	5	0	3	3	0	0
Greenville	South Carolina	55	42	1	0	5	0	0	7
Hamilton County	Ohio	9	2	1	0	4	2	0	0
Houghton County	Michigan	27	14	0	0	4	8	1	0
Houston	Texas	7	0	5	0	2	0	0	0
Jackson	Mississippi	7	1	3	0	1	1	1	0
Jacksonville	Florida	6	2	1	0	1	2	0	0
Jefferson County	Alabama	24	10	9	0	5	0	0	0
Kane County	Illinois	143	86	46	0	2	1	1	7
Kansas City	Missouri	29	5	6	1	13	4	0	0
Kingston	New York	77	34	26	4	1	4	7	1
Knox County	Tennessee	91	22	42	0	19	6	0	2
Lake Worth, Greenacres and Palm Springs	Florida	7	3	1	0	2	1	0	0
Louisville	Kentucky	10	4	2	0	4	0	0	0
Milledgeville	Georgia	55	41	5	0	9	0	0	0
Milwaukee	Wisconsin	7	1	5	0	0	0	1	0

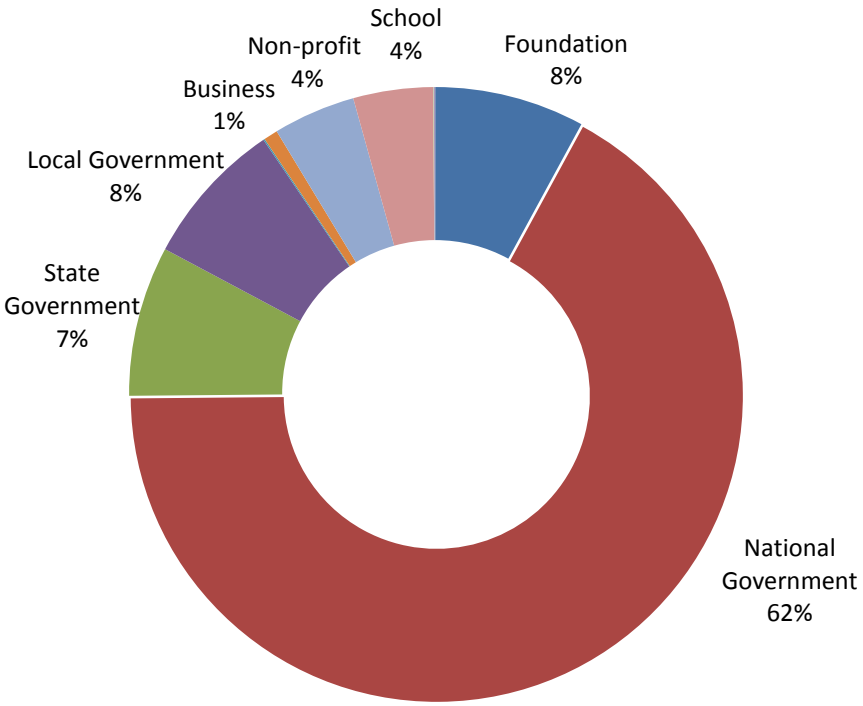
Table 10: Media Type by Community Partnership (n=1,642; continued)

Community Partnership	State	Total Number of Media Generated	Newspaper	Website	Billboard	TV	Radio	Social media	Other communications
Moore and Montgomery Counties	North Carolina	9	9	0	0	0	0	0	0
Nash and Edgecombe Counties	North Carolina	14	7	6	0	0	0	0	1
New Orleans	Louisiana	7	5	1	0	1	0	0	0
Oakland	California	3	0	2	0	0	0	1	0
Omaha	Nebraska	4	2	0	0	1	1	0	0
Philadelphia	Pennsylvania	0	0	0	0	0	0	0	0
Phoenix	Arizona	7	2	0	0	5	0	0	0
Portland/Multnomah County	Oregon	11	2	8	0	0	1	0	0
Rancho Cucamonga	California	101	12	49	0	38	0	0	2
Rochester	New York	5	1	0	0	2	1	0	1
San Antonio	Texas	0	0	0	0	0	0	0	0
King County/Seattle	Washington	12	2	7	0	1	1	1	0
Somerville	Massachusetts	0	0	0	0	0	0	0	0
Spartanburg County	South Carolina	7	5	0	0	2	0	0	0
Washington, DC	District of Columbia	4	2	1	0	1	0	0	0
Watsonville/Pajaro Valley	California	21	14	6	0	1	0	0	0

Revenue Generated

Community partnerships were required to generate revenue to match or exceed the amount received through the Healthy Kids, Healthy Communities grant (see Figure 8). In comparison to the $17,948,003.53 provided through the Robert Wood Johnson Foundation across all 49 communities, sites cumulatively generated an additional $137,390,495.77 in Matching Funds. Total Matching Fund amounts differed by site, ranging from $228,650.00 to $88,033,172.00. Partnerships also amassed support beyond matching funds. Seven of forty-nine sites generated funding from other sources, amounting to $66,637,780.66 in cash and in-kind revenue (ranging between $2,000.00 and $17,995,632.19). See Table 11 for total revenue generated by community partnerships.

Figure 8: Sources of Revenue Community Partnerships Leveraged



A majority of funding (67%) was leveraged from national government offices and programs (e.g., Communities Putting Prevention to Work, Community Transformation grants, whereas businesses provided one percent ($1,504,568). Both local government sources and foundations tied as the second highest source of additional funding. Each provided eight percent of additional funding to community partners. State government followed close behind by contributing seven percent, and non-profit organizations and schools both contributed four percent.

Primary partner expenses are also shown in Table 12.

Table 11: Total Revenue Generated by Community Partnerships

Community Partnership	State	HKHC Funds	Total Amount of Matching Funds Generated	Total Amount of Other Funds Generated	Total Funds
Baldwin Park	California	$ 402,199.00	$ 903,594.00	$ -	$ 903,594.00
Benton County	Oregon	$ 317,116.00	$ 452,811.00	$ 1,627,403.00	$ 2,080,214.00
Boone and Newton Counties	Arizona	$ 317,978.86	$ 910,208.28	$ 487,480.94	$ 1,397,689.22
Buffalo	New York	$ 359,999.00	$ 456,084.00	$ 512,600.00	$ 968,684.00
Caguas	Puerto Rico	$ 260,378.20	$ 273,623.00	$ 369,880.01	$ 643,503.01
Central Valley	California	$ 402,961.00	$ 1,798,000.00	$ 1,930,000.00	$ 3,728,000.00
Charleston	West Virginia	$ 359,000.00	$ 563,152.00	$ 788,858.30	$ 1,352,010.30
Chattanooga	Tennessee	$ 352,024.90	$ 1,316,533.80	$ -	$ 1,316,533.80
Chicago	Illinois	$ 404,492.00	$ 1,036,933.00	$ -	$ 1,036,933.00
Columbia	Missouri	$ 387,273.72	$ 993,978.00	$ 1,399,000.00	$ 2,392,978.00
Cook County	Georgia	$ 359,999.28	$ 250,360.00	$ 489,100.00	$ 739,460.00
Cuba	New Mexico	$ 359,852.40	$ 199,793.59	$ 86,494.00	$ 286,287.59
Denver	Colorado	$ 364,980.00	$ 2,953,895.00	$ 82,610.00	$ 3,036,505.00
Desoto, Marshall and Tate Counties	Mississippi	$ 294,966.00	$ 605,002.00	$ 714,318.00	$ 1,319,320.00
El Paso	Texas	$ 269,309.00	$ 336,680.00	$ -	$ 336,680.00
Fitchburg	Massachusetts	$ 360,000.00	$ 431,942.00	$ 122,073.00	$ 554,015.00
Flint	Michigan	$ 377,738.77	$ 326,755.00	$ 500,000.00	$ 826,755.00
Grant County	New Mexico	$ 358,793.00	$ 343,260.05	$ 117,635.23	$ 460,895.28
Greenville	South Carolina	$ 359,481.00	$ 1,051,677.16	$ 17,500.00	$ 1,069,177.16
Hamilton County	Ohio	$ 347,935.11	$ 1,020,794.70	$ 300,000.00	$ 1,320,794.70
Houghton County	Michigan	$ 399,032.00	$ 567,620.30	$ 64,650.00	$ 632,270.30
Houston	Texas	$ 359,998.00	$ 434,103.00	$ 16,500.00	$ 450,603.00
Jackson	Mississippi	$ 360,000.00	$ 253,579.09	$ 55,000.00	$ 308,579.09
Jacksonville	Florida	$ 358,124.00	$ 291,200.00	$ 403,440.00	$ 694,640.00
Jefferson County	Alabama	$ 360,001.00	$ 495,302.00	$ 17,995,632.19	$ 18,490,934.19
Kane County	Illinois	$ 383,400.00	$ 1,003,081.00	$ 171,900.00	$ 1,174,981.00

Table 11: Total Revenue Generated by Community Partnerships (continued)

Community Partnership	State	HKHC Funds	Total Amount of Matching Funds Generated	Total Amount of Other Funds Generated	Total Funds
Kansas City	Missouri	$ 359,799.00	$ 1,337,704.00	$ 75,900.00	$ 1,413,604.00
Kingston	New York	$ 335,261.16	$ 713,849.00	$ 1,429,947.04	$ 2,143,796.04
Knox County	Tennessee	$ 354,523.51	$ 464,544.00	$ 195,720.00	$ 660,264.00
Lake Worth, Greenacres and Palm Springs	Florida	$ 348,229.46	$ 635,155.00	$ 889,000.00	$ 1,524,155.00
Louisville	Kentucky	$ 307,187.80	$ 1,204,864.00	$ 11,920,500.00	$ 13,125,364.00
Milledgeville	Georgia	$ 363,739.58	$ 1,045,233.00	$ 449,750.00	$ 1,494,983.00
Milwaukee	Wisconsin	$ 372,742.48	$ 250,345.36	$ 1,835,900.00	$ 2,086,245.36
Moore and Montgomery Counties	North Carolina	$ 356,244.00	$ 1,075,240.00	$ -	$ 1,075,240.00
Nash and Edgecombe Counties	North Carolina	$ 360,001.00	$ 1,315,160.00	$ -	$ 1,315,160.00
New Orleans	Louisiana	$ 383,364.32	$ 228,650.00	$ 576,291.00	$ 804,941.00
Oakland	California	$ 401,508.00	$ 6,034,936.00	$ -	$ 6,034,936.00
Omaha	Nebraska	$ 369,460.35	$ 420,878.72	$ 252,600.00	$ 673,478.72
Philadelphia	Pennsylvania	$ 380,000.00	$ 254,688.00	$ 392,129.00	$ 646,817.00
Phoenix	Arizona	$ 360,001.00	$ 1,062,846.00	$ 3,069,800.00	$ 4,132,646.00
Portland/Multnomah County	Oregon	$ 360,000.00	$ 533,280.00	$ 1,790,000.00	$ 2,323,280.00
Rancho Cucamonga	California	$ 274,774.31	$ 7,394,251.00	$ 4,722,557.00	$ 12,116,808.00
Rochester	New York	$ 365,130.00	$ 244,155.00	$ 406,500.00	$ 650,655.00
San Antonio	Texas	$ 358,567.33	$ 216,327.00	$ 8,967,590.95	$ 9,183,917.95
King County/Seattle	Washington	$ 390,849.69	$ 4,022,645.72	$ 112,100.00	$ 4,134,745.72
Somerville	Massachusetts	$ 341,018.00	$ 88,033,172.00	$ 430,000.00	$ 88,463,172.00
Spartanburg County	South Carolina	$ 385,401.75	$ 721,303.00	$ 221,421.00	$ 942,724.00
Washington, DC		$ 823,168.55	$ 268,370.00	$ 2,000.00	$ 270,370.00
Watsonville	California	$ 360,000.00	$ 642,937.00	$ 646,000.00	$ 1,288,937.00

Table 12: Expenses for Community Partnerships								
Community Partnership	**Assessment**	**Capital Improvements**	**Communications / Marketing**	**Partner Related Expenses**	**New Program**	**Personnel**	**Unpaid Volunteer**	**Other**
Baldwin Park	–	–	$439,386	$1,484,928	–	$920,479	–	$150,000
Benton County	$201,952	$262,850	$7,015	$138,142	$1,732,408	$405,280	–	–
Boone and Newton Counties	$6,500	$685,115	$22,994	$283,971	$878,958	$544,392	$48,946	$175
Buffalo	–	$125,000	$214,155	$507,237	$818,355	$523,391	–	$80,000
Caguas	$8,770	–	$40,247	$126,533	$336,300	$394,275	$17,892	–
Central Valley	–	–	–	$524,909	$1,663,000	$723,604	$1,000,000	$669,448
Charleston	$3,800	$223,725	$235,465	$574,556	$692,784	$800,199	$4,710	$274,100
Chattanooga	–	$750,000	$20,000	$363,782	$804,930	$474,465	$2,368	$178,796
Chicago	$193,250	$635,433	$67,000	$552,327	$1,002,933	$926,005	$39,000	$3,276
Columbia	$321,672	$815,000	$10,552	$126,137	$2,224,000	$397,892	–	–
Cook County	$30,000	$45,000	$5,850	$384,241	$649,500	$194,988	$95,620	$15,000
Cuba	$5,000	$4,621	$90,934	$156,566	$111,872	$470,073	$1,110	$2,507
Denver	$1,659,824	$522,250	$34,946	$1,921,577	$3,027,393	$4,551,679	$900	$52,523
Desoto, Marshall and Tate Counties	–	$332,750	–	$120,413	$1,106,742	$338,595	$11,510	$52,026
El Paso	$5,199	–	$25,377	$69,755	$95,000	$403,958	–	$6,700
Fitchburg	$14,405	$124,517	$62,031	$370,936	$488,901	$835,375	$4,428	–
Flint	$3,634	$470,100	$5,244	$116,535	$735,676	$396,122	$44,800	$2,722
Grant County	$10,675	$50,000	$27,606	$293,681	$147,352	$567,404	$11,950	$350
Greenville	$309,668	$40,000	$587,063	$1,143,975	$529,208	$828,422	–	$112,903
Hamilton County	$310,367	–	$482,777	$874,678	$1,203,732	$1,273,849	–	$282,376
Houghton County	–	$243,562	$500	$151,072	$604,819	$889,115	–	$21,881
Houston	$1,400	$500	$4,800	$150,620	$299,802	$497,760	$8,875	$5,762
Jackson	$12,500	$50,000	$25,334	$316,667	$256,600	$464,585	$46,684	$19,535
Jacksonville	$3,700	$2,500	$177,977	$132,065	$571,520	$344,232	–	–
Jefferson County	$39,834	$11,387,000	$18,209	$230,639	$18,062,799	$608,061	–	–
Kane County	$125,000	$67,200	$41,635	$52,900	$555,400	$920,046	–	$295,800

Table 12: Expenses for Community Partnerships (continued)								
Community Partnership	**Assessment**	**Capital Improvements**	**Communications / Marketing**	**Partner Related Expenses**	**New Program**	**Personnel**	**Unpaid Volunteer**	**Other**
Kansas City	$24,940	$319,427	$81,906	$432,622	$940,164	$335,308	–	$7,000
Kingston	$20,480	$529,580	$27,934	$791,712	$1,771,967	$875,874	$7,778	$227,020
Knox County	$101,618	$85,650	$34,372	$156,527	$481,263	$578,889	–	$46,475
Lake Worth, Greenacres and Palm Springs	$1,000	$119,682	$65,796	$701,271	$889,841	$719,420	$33,000	–
Louisville	$9,646	$299,590	$119,292	$868,967	$681,353	$831,558	–	$12,047,500
Milledgeville	$16,818	$772,754	–	$86,607	$1,002,928	$505,069	–	$340,100
Milwaukee	–	–	$30,771	$140,727	$1,940,540	$437,836	–	$4,210
Moore and Montgomery Counties	$483,415	$557,999	$160,718	$462,114	$388,811	$500,727	–	$3,903
Nash and Edgecombe Counties	$313,590	$692,244	$253,057	$1,384,250	$1,232,193	$1,125,219	–	
New Orleans	$26,500	$576,291	$66,250	$378,321	$782,791	$443,286	–	$3,757
Oakland	–	$5,220,745	$2,969	$662,484	–	$550,246	–	
Omaha	$18,718	$177,900	$583	$294,508	$664,912	$442,817	–	
Philadelphia	$20,000	–	$122,778	$172,563	$126,105	$760,843	–	$339,629
Phoenix	$42,245	$2,294,950	$9,837	$1,129,989	$3,539,152	$1,285,562	–	
Portland/Multnomah County	$157,292	$1,296,292	$166,200	$163,225	$2,292,030	$674,414	–	
Rancho Cucamonga	–	$10,786,153	$385,475	$287,498	$12,014,770	$308,979	–	$462,055
Rochester	$36,700	–	$42,445	$207,028	$574,534	$514,162	–	$700
San Antonio	$2,762	$8,716,381	$39,280	$183,597	$8,963,776	$9,216,138	–	$10,001
King County/Seattle	$1,914	$3,771,420	$6,040	$158,229	$3,845,520	$637,659	–	$47,946
Somerville	–	$87,965,000	$24,175	$57,598	$88,434,678	$612,727	–	$990
Spartanburg County	$219,250	$337,876	$18,143	$179,506	$825,180	$454,951	–	$4,185
Washington, DC	$11,260	–	$2,350	$209,174	$167,750	$336,635	–	$2,763
Watsonville	$175,093	$305,000	$5,381	$197,760	$989,976	$924,232	$175,093	$2,500

Partnership and Community Capacity

A total of 603 individuals responded from 48 of the 49 partnerships. Of the sample, 419 were female (69%), 178 were male (30%), and 6 did not respond (1%). The majority of respondents were between the ages of 26-45 (45%) or 46-65 (43%). The remaining respondents were between the ages of 18-25 (4%) and 66 or older (8%). Four participants (< 1%) provided no response. Sixty-eight percent of respondents identified themselves as White, 12% as African American, 11% as Hispanic or Latino, 2% as American Indian/Alaska Native, 2% Asian, 2% Not Hispanic or Latino, 1% Other, and < 1% Pacific Islander/Native Hawaiian. The remaining 1% identified as ethnicity unknown or did not indicate ethnicity.

Respondents were asked to identify their role(s) in the partnership or community. Of the 818 identified roles, 22% were representatives of the community partnership's lead agency, 36% were representatives of the community partnership's partner organizations, 17% identified as community members, 14% as community leaders, 5% as public officials, and 7% as "other." Individuals participating in the survey also identified their organizational affiliation. Almost a quarter (24%) indicated affiliation to a local government agency (city or county) and 17% identified as "other organization." Of the remaining respondents, 12% were affiliated with a faith- or community-based organization, 10% with a school (district, elementary, middle, or high school), 10% with a university or research/evaluation organization, 9% with a health care organization, 7% with an advocacy organization, 7% with a neighborhood organization, and 3% with a child care or after school organization. Four respondents (< 1%) did not respond.

Leadership (n=8 items)

Overall, responses showed agreement or strong agreement (97% total) to statements suggesting that the partnerships established a group of core leaders who had the skills to help achieve partnership goals. Responses also indicated that participants in the survey felt core leadership was organized and retained the skills to help the partnerships and initiatives succeed. Respondents agreed or strongly agreed (97%) that leaders worked to motivate others, worked with diverse groups, and strived to follow through on initiative promises. Ninety-three percent of respondents agreed or strongly agreed that members of the leadership teams retained a respected role in the community.

Partnership Structure (n=24 items)

While respondents generally felt that the partnerships adequately provided the necessary in-kind space, equipment, and supplies for partners to conduct business and meetings related to the partnership's initiatives (67% agreed or strongly agreed), 27% of respondents did not know if the provision of space and equipment was sufficient. Most (77%) agreed that the partnerships had processes in place for dealing with conflict, organizing meetings, and structuring goals, although 15% responded "I don't know", indicating a lack of familiarity in this area, and 6% felt these processes were not established.

Partnership members (leadership and partners) were generally perceived by respondents to be involved in other communities and various community groups, bridging the gaps between neighboring areas, and helping communities work together (87%).Though the majority (67%) of respondents indicated agreement with statements about the partnerships' effectiveness in seeking learning opportunities, developing the partnerships, and planning for sustainability, 15% of responses disagreed, and 14% were not aware of activities specific to development and sustainability.

Relationship with Partners (n=4 items)

Ninety-five percent of responses to statements about leadership and partner relationships were positive (agreed or strongly agreed), indicating that the majority of respondents felt the partners and leadership trusted and worked to support each other.

Partner Capacity (n=18 items)

Nearly all responses (92% agreed or strongly agreed) indicated that respondents felt partners possessed the skills and abilities to communicate with diverse groups of people and engage decision makers (e.g., public officials, community leaders). Furthermore, 84% of individuals responding to the survey felt that partners were dedicated to the initiatives, interested in enhancing a sense of community, and motivated to create change.

Political Influence of Partnership (n=2 items)

Respondents felt that the partnerships' leadership was visible within the communities, with 85% of responses supporting statements that leadership was known by community members and worked directly with public officials to promote initiatives. Eight percent of survey participants responded "I don't know" to these statements.

Perceptions of Community and Community Members (n=22 items)

Statements suggesting that the communities were a good place to live, with community members who shared the same goals and values, helped each other, and were trustworthy were supported by 80% of survey responses, while 12% of respondents indicated a lack of knowledge about these attributes. Respondents also strongly supported suggestions that community members helped their neighbors, though respondents also agreed that some community members may take advantage of others if given the chance (89% agreed or strongly agreed). Respondents were less convinced that community members would intervene on behalf of another individual in the communities in cases of disrespect, disruptive behavior, or harmful behavior. While 58% agreed or strongly agreed that community members would intervene on behalf of another resident, 28% disagreed/strongly disagreed and 12% indicated that they did not know how community members would act in these situations.

Most survey participants (79%) felt community members were aware of the partnerships' initiatives and activities. Seventy-six percent of respondents agreed that the partnerships equally divided resources among different community groups in need (e.g., racial/ethnic minorities, lower income), though 16% disagreed and felt resources were not equally distributed. Overall, respondents agreed or strongly agreed that partners and members of the communities maintained active involvement in partnership decisions and activities (91%), and agreed that residents and partners had the opportunity to function in leadership roles and participate in group decision-making processes (89%).

Partnership and Community Capacity Survey Results
Cross-Site Respondent Summary

n=603 respondents

Respondent Demographics

Respondent Roles Within the Partnership

sum of roles: 818

Community Partnership Lead	177	21.64%
Community Partnership Partner	292	35.70%
Public Official	42	5.13%
Community Leader	116	14.18%
Community Member	138	16.87%
Other role	53	6.48%

603 Total Respondents

Gender Distribution

Total female	419	69.49%
Total Male	178	29.52%
Total No response	6	1.00%

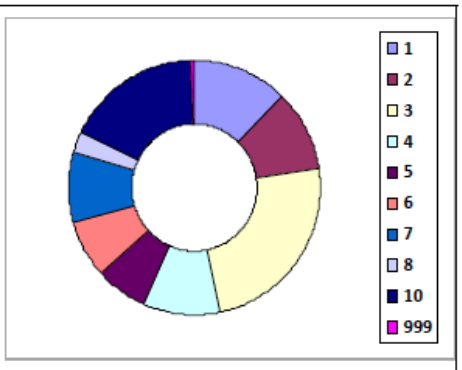
Age Distribution

18-25	22	3.65%
26-45	274	45.44%
46-65	256	42.45%
66+	47	7.79%
No response	4	0.66%

Race/Ethnicity

African American	77	11.99%
American Indian Alaska Native	14	2.18%
Asian	13	2.02%
Pacific Islander/ Native Hawaiian	1	0.16%
White	438	68.22%
Hispanic or Latino	71	11.06%
Not Hispanic or Latino	11	1.71%
Ethnicity unknown/ not sure	1	0.16%
Refused to ID ethnicity	7	1.09%
Other ethnicity	9	1.40%

Faith- or Community Based Organization	73	12.3%	(1)
School (district, elementary, middle, high)	60	10.1%	(2)
Local Government Agency (city, county)	143	24.1%	(3)
University or Research/Evaluation Organization	58	9.8%	(4)
Neighborhood Organization	41	6.9%	(5)
Advocacy Organization	42	7.1%	(6)
Health Care Organization	54	9.1%	(7)
Child Care or Afterschool Organization	16	2.7%	(8)
Other	102	17.2%	(10)
No response	4	0.7%	(999)



Survey Results Summary

Provision of required space and equipment

Partnership and Community Capacity Survey Results
Cross-Site Respondent Summary

n=603 respondents

Participants provided level of agreement to statements indicating the community partnership provided adequate space, equipment, and supplies to conduct business and meetings.

Strongly agree	32.74%	Strongly disagree	0.59%
Agree	34.59%	I don't know	27.12%
Disagree	3.57%	No response	1.38%

Partner skills and communication

Participants provided level of agreement to statements supporting partner skills and ability to communicate with and engage multiple types of people (e.g., public officials, community leaders).

Strongly agree	41.47%	Strongly disagree	0.20%
Agree	50.84%	I don't know	3.81%
Disagree	2.23%	No response	1.45%

Community and community members

Participants provided level of agreement to statements suggesting the communities are good places to live, and that community members are helpful, can be trusted, and share the same goals or values.

Strongly agree	26.94%	Strongly disagree	0.60%
Agree	53.01%	I don't know	12.02%
Disagree	5.99%	No response	1.45%

Partner and community involvement

Participants provided level of agreement to statements indicating partners and the community were actively involved in partnership activities, meetings, and decisions.

Strongly agree	42.59%	Strongly disagree	0.36%
Agree	48.06%	I don't know	4.05%
Disagree	3.68%	No response	1.26%

Partner and partnership development

Participants provided level of agreement to statements suggesting the partnership and its partners seek ways learn, develop, and enhance sustainability.

Strongly agree	17.68%	Strongly disagree	2.52%
Agree	49.65%	I don't know	13.60%
Disagree	14.86%	No response	1.69%

Partnership structure, organization, and goals

Participants provided level of agreement to statements suggesting partnership has processes in place related to structure, meeting organization, and goals.

Strongly agree	37.56%	Strongly disagree	0.64%
Agree	39.64%	I don't know	15.12%
Disagree	5.61%	No response	1.44%

Relationship between partners and leadership

Partnership and Community Capacity Survey Results
Cross-Site Respondent Summary

n=603 respondents

Participants provided level of agreement to statements indicating the leadership and partners trust and support each other.

Strongly agree	50.29%	Strongly disagree	0.54%
Agree	44.36%	I don't know	2.86%
Disagree	1.53%	No response	0.41%

Community members intervene

Participants provided level of agreement to statements indicating that community members can be counted on intervene in instances where someone is disrespectful, disruptive, or harmful to another community member.

Strongly agree	17.63%	Strongly disagree	10.17%
Agree	40.91%	I don't know	12.27%
Disagree	17.74%	No response	1.27%

Leadership motivation

Participants provided level of agreement to statements suggesting the leadership is motivated to help others, work with diverse groups, shows compassion, and follows through.

Strongly agree	60.90%	Strongly disagree	0.62%
Agree	35.78%	I don't know	1.33%
Disagree	0.95%	No response	0.41%

Community member and partner participation

Participants provided level of agreement to statements indicating that community members and partners have opportunities to serve in leadership roles and participate in group decision-making.

Strongly agree	47.65%	Strongly disagree	0.72%
Agree	41.79%	I don't know	6.14%
Disagree	3.10%	No response	0.61%

Involvement in other communities

Participants provided level of agreement to statements suggesting leadership and partners are involved in other communities and various community groups, and help communities work together.

Strongly agree	41.38%	Strongly disagree	0.33%
Agree	45.77%	I don't know	7.88%
Disagree	3.15%	No response	1.49%

Community member willingness to assist

Participants provided level of agreement to statements suggesting most community members help neighbors and solve community problems. It also suggested some community members may take advantage of others.

Strongly agree	46.10%	Strongly disagree	0.25%
Agree	42.91%	I don't know	6.67%
Disagree	2.49%	No response	1.58%

Core leadership and leadership skills

Partnership and Community Capacity Survey Results
Cross-Site Respondent Summary

n=603 respondents

Participants provided level of agreement to statements suggesting the community partnership has a core leadership group organizing efforts, and that leaders have the skills to help the partnership achieve its goals.

Strongly agree	56.14%	Strongly disagree	0.50%
Agree	41.29%	I don't know	0.75%
Disagree	1.24%	No response	0.08%

Partner motivation

Participants provided level of agreement to statements indicating that partners won't give up in their efforts to create change and increase sense of community through the partnership.

Strongly agree	28.58%	Strongly disagree	1.22%
Agree	55.11%	I don't know	7.96%
Disagree	5.69%	No response	1.44%

Visibility of leadership

Participants provided level of agreement to statements suggesting the leadership is known in the community and works with public officials.

Strongly agree	38.47%	Strongly disagree	0.25%
Agree	46.85%	I don't know	8.54%
Disagree	4.39%	No response	1.49%

Leadership lives in the community

Participants provided level of agreement to a statement indicating that at least one member of the leadership resides within the community.

Strongly agree	54.06%	Strongly disagree	1.16%
Agree	26.87%	I don't know	13.60%
Disagree	3.81%	No response	0.50%

Leadership has a respected role in the community

Participants provided level of agreement to a statement that suggests at least one member of the leadership team has a respected role in the community.

Strongly agree	57.71%	Strongly disagree	0.50%
Agree	35.16%	I don't know	4.98%
Disagree	1.16%	No response	0.50%

Community partnership initiatives are known

Participants provided level of agreement to a statement suggesting that community members are aware of the partnership's initiatives and activities.

Strongly agree	28.52%	Strongly disagree	0.17%
Agree	50.91%	I don't know	10.61%
Disagree	7.63%	No response	2.16%

Division of resources

Partnership and Community Capacity Survey Results
Cross-Site Respondent Summary

n=603 respondents

Participants provided level of agreement to a statements suggesting that resources are equally divided among different community groups (e.g., racial/ethnic, lower income).

Strongly agree	26.53%	Strongly disagree	1.33%
Agree	49.59%	I don't know	6.63%
Disagree	14.26%	No response	1.66%

Systems Thinking in Communities

"Systems thinking" represents a range of methods, tools, and approaches for observing the behaviors of a system (e.g., family, community, organization) and how these behaviors change over time; changes may occur in the past, present, or future. The group model building session had two primary activities: 1) a Behavior Over Time Graph exercise; and 2) a Causal Loop Diagram (or structural elicitation) exercise.

Behavior Over Time Graphs

To identify the range of things that affect or are affected by policy, system, and environmental changes in community partnerships related to healthy eating, active living, and childhood obesity, participants designed graphs to name the influences and to illustrate how the influences have changed over time (past, present, and future).

All of the graphs (n=1,720) were printed and sorted into 11 broad domains based on the variable name and then further sorted into relevant categories (n=122 categories) and subcategories (n=272 subcategories; see Table 13).

The number of BOTGs generated per community partnership ranged from 17 to 61 with most community partnerships producing less than 40 graphs. Most community partnerships yielded graphs from at least 8 of the 11 categories.

Categories with the greatest number of graphs were healthy eating environments, active living behavior, and social determinants of health (see Table 13). Obesity and long-term outcomes, funding, and marketing and media coverage had the least number of graphs. The most prevalent subcategories (i.e., those with ≥20 graphs) within each category are also presented in Table 13.

Except for one community partnership that held its GMB session in 2013, all time frames on the graphs ended in 2011 or 2012 when the evaluation site visits took place. The baseline years varied across the BOTGs (see Table 14). Approximately two-thirds of graphs had baseline years starting in 1970 or later. Twenty graphs had baseline years prior to 1900. Forty-one percent of graphs had time frames that were modified to enable grouping graphs with similar trends. The difference between the written and assigned time frames differed by more than 20 years for nearly half of these graphs (n=229 graphs). Of these, 25% had written baseline years of 1900 or earlier and 63% had written baseline years of 1950 or earlier. Over half of these graphs were assigned alternate codes to preserve additional trends occurring prior to the assigned time frame.

The ending trends of 1,261 graphs with variables positively associated with health were examined next (see Table 15). The prevalence of reinforcing increasing trends was highest for active living environments (37.4%), health eating environments (29.3%), partnership and community capacity (38.8%), and policies (30.2%). Reinforcing increasing trends suggest a perceived acceleration of these factors over time. Interestingly, these categories represented target areas of the HKHC and other obesity prevention initiatives. Programs and policies had the highest frequency of graphs with a balancing increasing trend, potentially suggesting that participants perceived programs and promotions as having increased over time but stabilized because they reached a point of saturation. Graphs depicting active living and healthy eating behaviors had the highest frequency of balancing decreasing trends (45.7% and 44.0%, respectively). Such trends suggest that participants viewed active living and healthy eating behaviors as declining but stabilizing in recent years—potentially the result of recent improvements in programs, environments, and policies targeting obesity. Finally, graphs with the highest frequency of linear or reinforcing decreasing trends (unfavorable trends) were those classified

Table 13. Distribution of graph domains and categories with ≥20 graphs

Domain, *Category*	Count	% of Total	% within Domain
Healthy eating environments	**334**	**19**	
General access to healthy foods	82		25
Schools	60		18
Local agriculture	52		16
Cost	35		10
Restaurants	29		9
Farmers' markets	20		6
Active living behavior	**262**	**15**	
Amount of physical activity	49		19
School transportation	36		14
Screen time	23		9
Outdoor play	21		8
Social determinants of health	**225**	**13**	
Crime and safety	47		21
Access to care	23		10
Poverty and income	23		10
Education	20		9
Active living environments	**181**	**11**	
Parks and play spaces	39		22
Bikability	31		17
Livability	29		16
Walkability	20		11
Programs and promotions	**163**	**10**	
Awareness/knowledge	67		41
Education/training	28		17
Healthy eating behavior	**161**	**9**	
General healthy eating	50		31
General unhealthy eating	30		19
Food preparation	20		12
Partnership and community capacity	**134**	**8**	
Partnerships/coalitions	63		47
Community engagement, involvement and input	23		17
Community capacity, sense of community, and social capital	20		15
Policies	**106**	**6**	
School policies	48		45
Local/regional/state government policies	23		22
Obesity and long-term outcomes	**89**	**5**	
Overweight/Obesity		60	67
Funding	**47**	**3**	
Marketing and media coverage	**18**	**1**	
Total	**1720**	**100**	

Note: 65 graphs could not be placed into these categories and were considered outliers.

Table 14. Characteristics of time frames among graphs that were coded (n=1,660)

Characteristic	Count	Percent
Baseline year of written time frames*		
1492-1899	20	1.4
1900-1949	180	12.3
1950-1959	179	12.2
1960-1969	99	6.8
1970-1979	147	10.0
1980-1989	202	13.8
1990-1999	201	13.7
2000-2009	381	26.0
2010-2013	54	3.7
Assigned time frame different from written time frame	687	41.0
Absolute difference (in years) between baseline years of written time frames and assigned time frames*		
0 years	963	58.0
1-4 years	51	3.1
5-9 years	58	3.5
10-19 years	162	9.8
20-39 years**	144	8.7
40+ years**	85	5.1
Assigned time frames***		
1492-1899	7	.4
1900-1949	111	6.7
1950-1959	191	11.5
1960-1969	123	7.4
1970-1979	202	12.2
1980-1989	220	13.3
1990-1999	246	14.8
2000-2009	516	31.1
2010-2013	42	2.5

* 197 graphs used text as the baseline year (e.g., “past”, 1960’s) instead of actual year. Therefore, the difference between written and assigned time frames could not be calculated. 187 of these graphs were coded as having assigned time frames that differed from the written time frames.

**Of the 229 graphs with differences ≥20 years between written and assigned time frames, 25% had written baseline years of 1900 or earlier and 63% had written baseline years of 1950 or earlier. 53% of the 229 graphs were coded with alternate historic trends.

*** Time frames for two graphs could not be assigned based on information provided (i.e., time frames written were “Moving Here” to “Exposure to Fast Food.”)

Table 15. Ending trends by domain for variables theoretically positively associated with health*

Category	Total	Reinforcing increasing trend**	Linear increasing trend	Balancing increasing trend	Stable	Balancing decreasing trend**	Linear or reinforcing decreasing trend
	N	% within Category					
Active living behavior	230	19.6	7.4	7.8	5.7	45.7	13.9
Active living environments	147	37.4	14.3	21.1	9.5	15.0	2.7
Funding	47	19.1	8.5	14.9	12.8	17.0	27.7
Healthy eating behavior	109	27.5	5.5	15.6	4.6	44.0	2.8
Healthy eating environments	249	29.3	12.4	12.4	12.0	26.9	6.8
Marketing and media coverage	8	.0	12.5	50.0	12.5	25.0	.0
Obesity and long term outcomes	3	.0	.0	.0	33.3	33.3	33.3
Partnership and community capacity	121	38.8	17.4	19.8	6.6	14.0	3.3
Policies	96	30.2	7.3	11.5	6.3	28.1	16.7
Programs and promotions	147	27.2	18.4	27.9	10.9	11.6	4.1
Social determinants of health	108	12.0	7.4	11.1	10.2	37.0	22.2
Total	1261	27.0	11.3	15.5	8.8	28.0	9.5

* Graphs categorized as “Marketing and media coverage” and “Obesity and long-term outcomes” are not presented because there were <10 graphs in these categories with variables that were positively associated with health.
** Potential intervention effect

as funding (27.7%) and social determinants of health (22.2%)—two areas that were neither targets of HKHC, nor readily modifiable through community health grants and initiatives.

The ending trends of 348 graphs with variables negatively associated with health were also examined but not shown because investigators perceived the number of graphs for many categories to be too small (i.e., all categories had <100 graphs and seven categories had ≤40 graphs). Interestingly, for six categories with ≥20 graphs, the most prevalent trend was balancing increasing, suggesting that participants viewed these negative factors to have increased but recently stabilized. Results are available upon request.

Figures 9-11 illustrate specific trends for select subcategories. It is important to note that the angles of the slopes and vertical location of the lines on these illustrative graphs are not accurate or meaningful since participants used varying scales for their y-axes. The figures simply depict the general patterns observed for different trend shapes. Figure 9 depicts the pattern of trends observed for “Cost of Healthy Foods/Produce” submitted by participants from 20 community partnerships. Trends in this subcategory were fairly unique in that they showed a high degree of clustering. Twenty-four of the 27 trends ended in balancing increasing, suggesting that prices have stabilized after historically increasing. Eleven of

these 24 graphs were S-shaped suggesting that the cost of healthy foods/produce increased exponentially before leveling off. Some participants perceived that costs stabilized prior to 2000 and others after 2000. Two of the remaining 27 graphs showed an increase (one linear and one reinforcing) in costs, and only one participant perceived costs as declining since 2000.

Figure 9. Summary of behavior over time graphs representing "Cost of Healthy Produce/Foods" (n=27 graphs from 20 community partnerships)

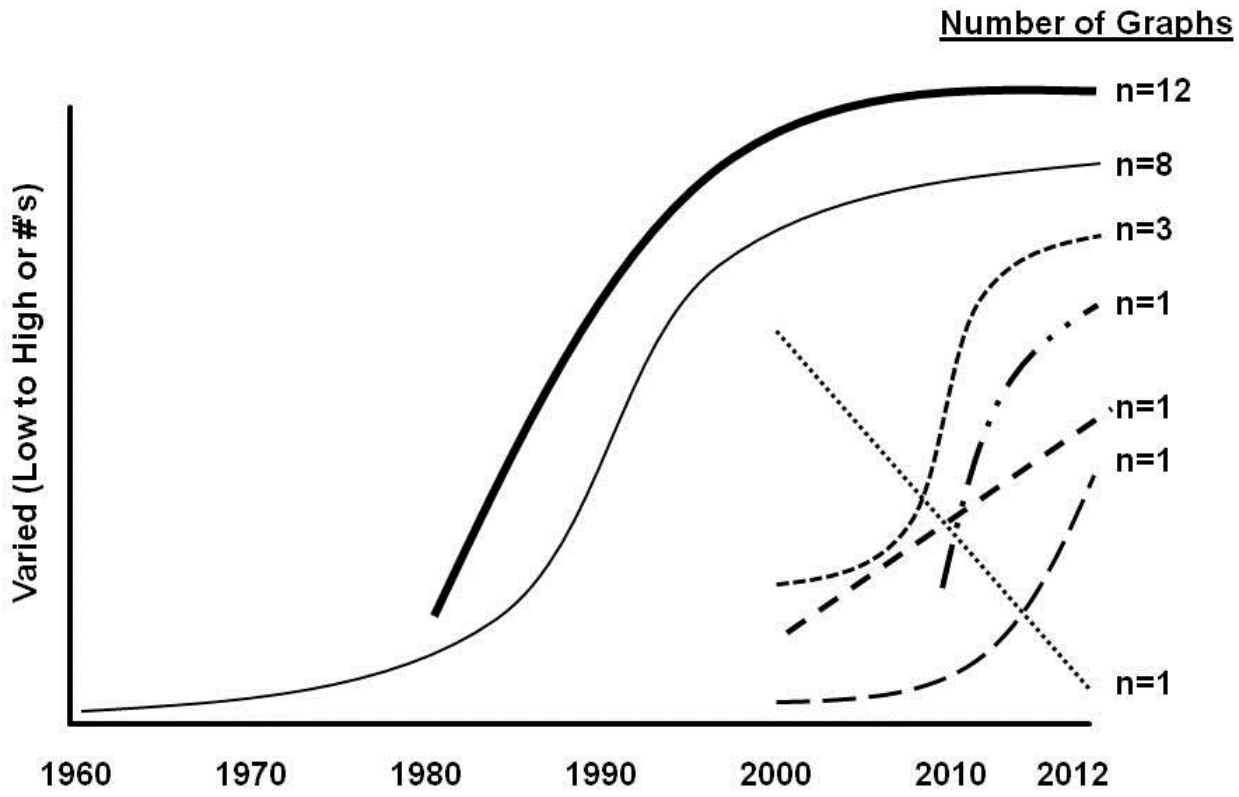
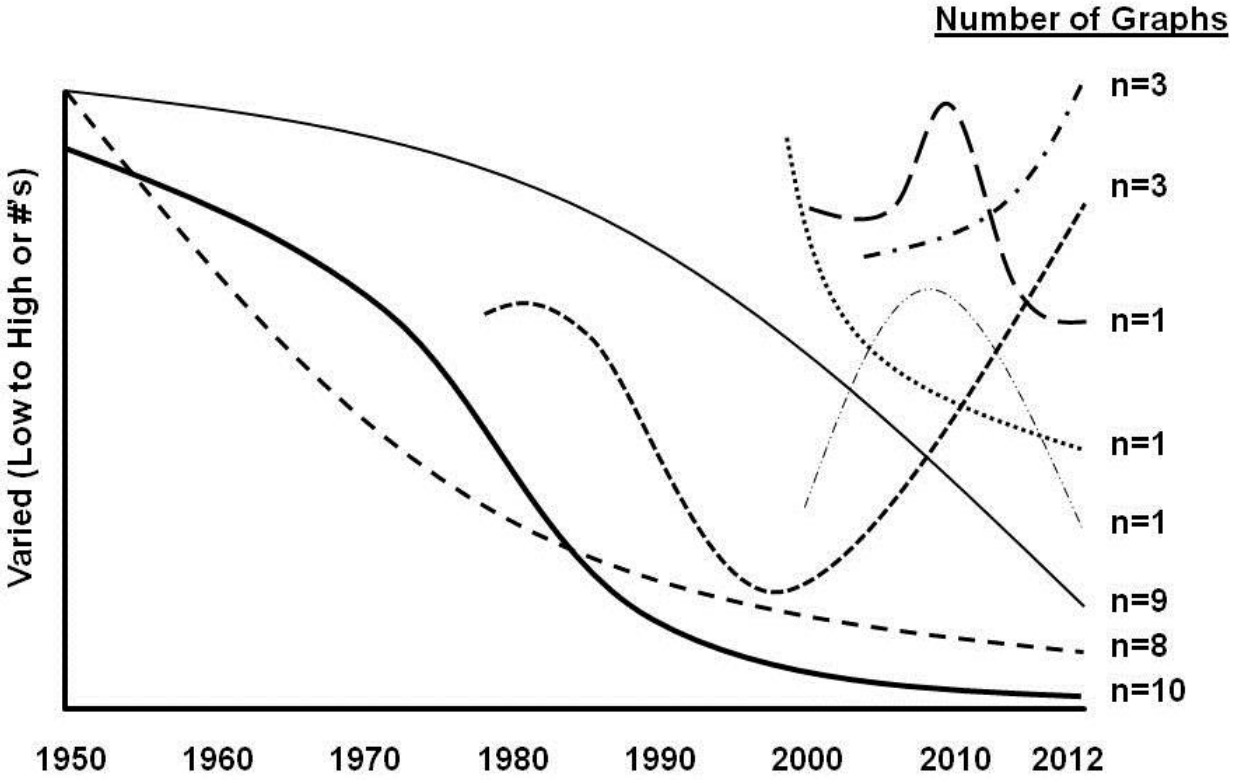


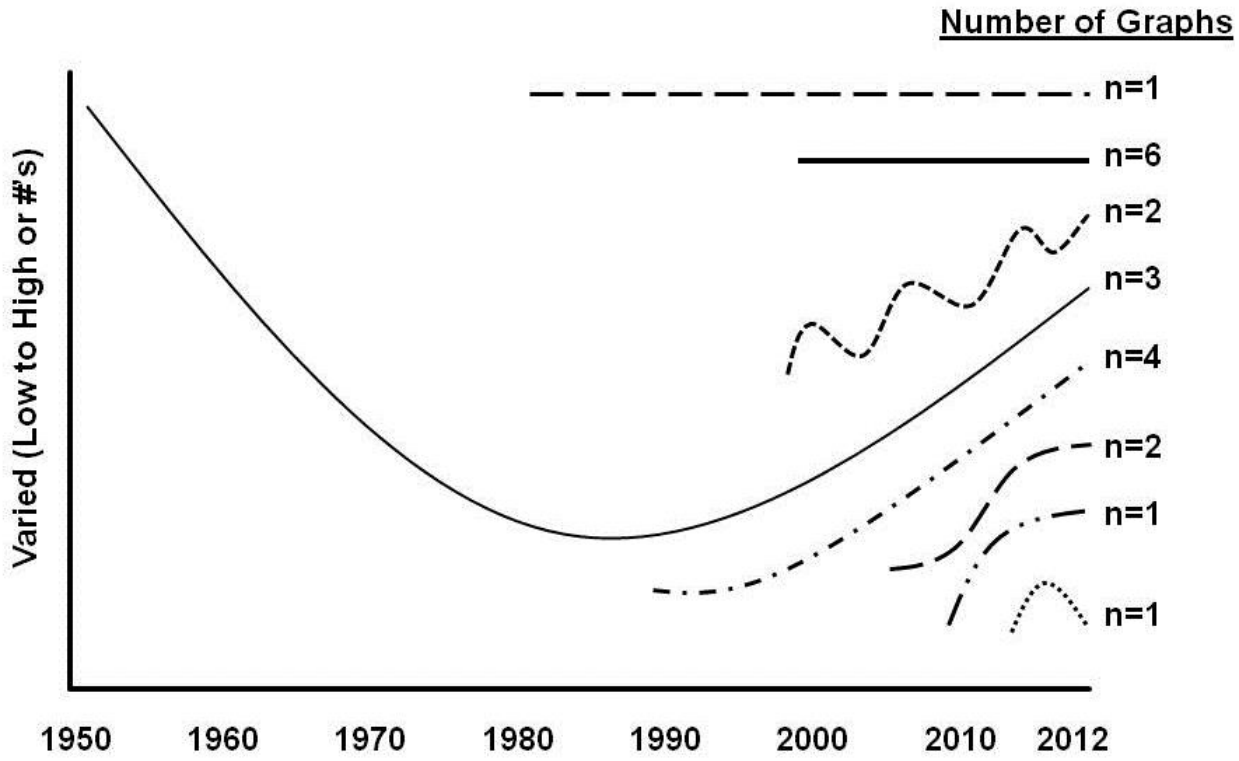
Figure 10 depicts the pattern of trends observed for “Active Transportation to School” submitted by participants from 25 community partnerships. Although the graphs in this category exhibited a high degree of variability in the types of trends drawn and timeframes, one can still identify patterns, in that 30 of the 36 graphs depicted a general decline in active commuting. Of these, 20 graphs suggested that the decline had recently leveled off (i.e., ended in balancing decreasing) while 10 showed that the decline continued to accelerate (i.e., ended in reinforcing decreasing). Six graphs showed an exponential increase in active commuting in recent years; three of which depicted a sharp decline prior to improvements in active school transport.

Figure 10. Summary of behavior over time graphs representing “Active Transportation to School” (n=36 graphs from 25 community partnerships)



Variability was also observed in graphs of participants from 16 community partnerships depicting trends in “Farmers’ Markets” which included availability or number of farmers’ markets, produce stands, mobile markets, and nutrition assistance benefits accepted by vendors/markets (see Figure 11). Twelve of the 20 graphs showed an increase in farmers’ markets, of which seven depicted a positive acceleration in farmers’ markets (i.e., reinforcing increasing), three a leveling off in farmers’ markets, and two fluctuations in farmers’ markets. Three of these graphs traced farmers’ markets back to 1950 and showed a decline in markets followed by an exponential increase. Seven of the 20 graphs had flat slopes, suggesting no changes in farmers’ markets over time. Only one graph depicted a recent increase followed by a decline in markets, notably during the HKHC period.

Figure 11. Summary of behavior over time graphs representing “Farmers’ Markets*”
(n=20 graphs from 16 community partnerships)



* Includes mobile markets, produce stands, vendors/markets accepting supplemental nutrition assistance program (SNAP) benefits

Causal Loop Diagrams

To examine the relationships among the variables from the behavior over time graphs, participants worked together and with facilitators to develop causal loop diagrams. Figure 12 illustrates a synthesis of the systems of policies, environments, local collaborations, and social determinants across the community partnerships that influence healthy eating, active living, and, ultimately, childhood obesity (see Grantee Products for an enlarged version of the synthesized causal loop diagram). This system and the dynamics within the system are complicated with many different elements interacting.

Models, such as Figure 12, provide a way to visualize all the elements of the system and their interactions, with a focus on causal relationships as opposed to associations. Through the model, specific types of causal relationships, or feedback loops, underlying the behavior of the dynamic system, can be identified to provide insights into what is working or not working in the system to support the intended outcomes (in this case, increases in healthy eating and active living, and decreases in childhood overweight and obesity).

In system dynamics, the goal is to identify and understand the system feedback loops, or the cause-effect relationships that form a circuit where the effects “feed back” to influence the causes. There are many different feedback loops interacting simultaneously to influence or to be influenced by each of the variables. Some variables may strengthen or increase values for variables they influence while other variables may limit or decrease these variables. Determining the feedback loop or loops that dominate the system’s behavior at any given time is a more challenging problem to figure out, and ultimately, requires the use of computer simulations.

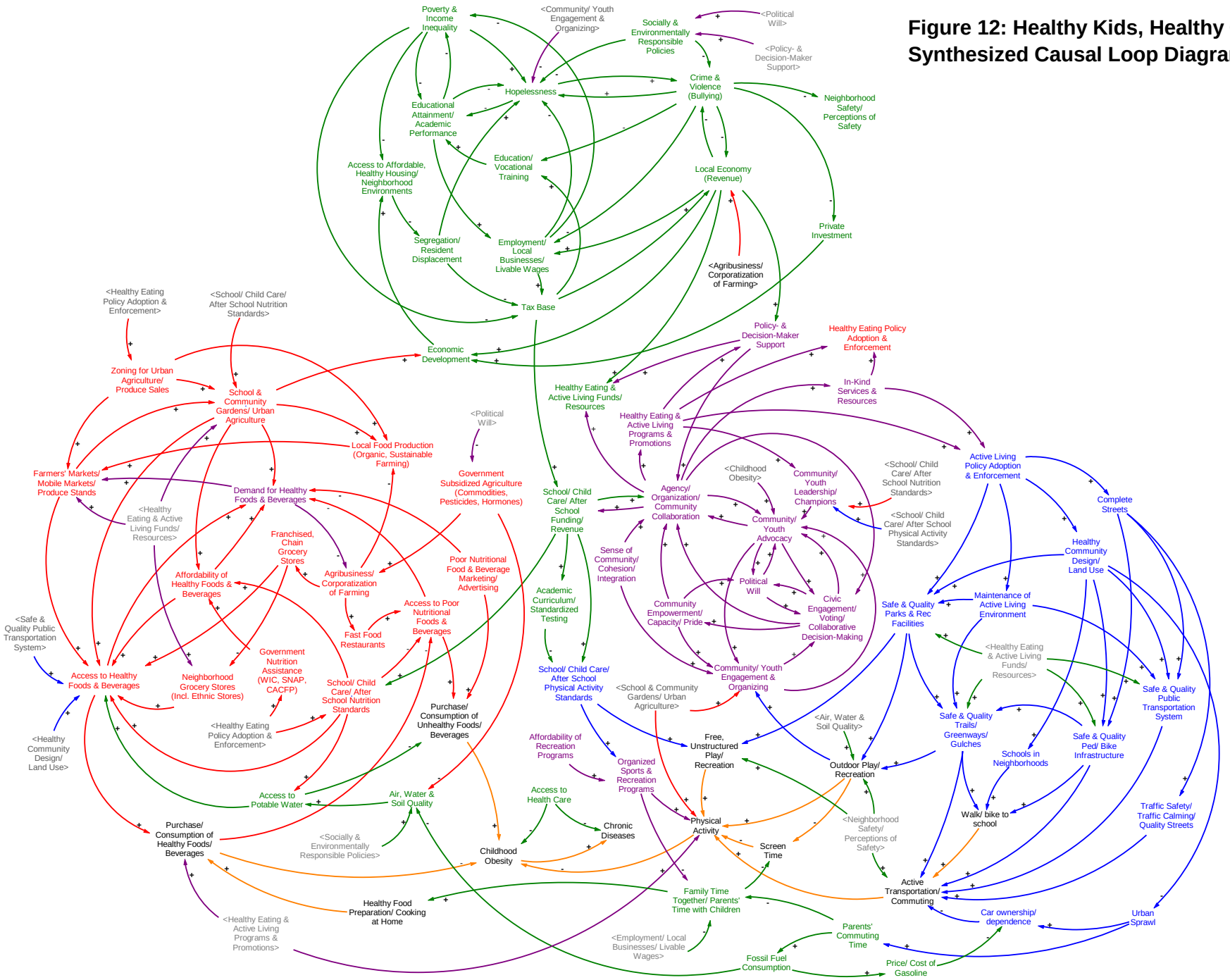
In Figure 12, the words represent variables of quantities that can increase and decrease over time (i.e., the behavior over time graphs). These variables are influenced by other variables as indicated by the lines with arrows. The lines with arrows represent causal relationships - this is what is known about the system and how it behaves.

The causal loop diagram (CLD) represents a holistic system and several subsystems. In order to digest the depth and complexity of the diagram, it is helpful to examine the CLD in terms of the subsystems of influence. Because of this project’s focus on healthy eating, active living, and childhood obesity, this system draws attention to a number of corresponding subsystems, including: healthy eating policies and environments (red), active living policies and environments (blue), health and health behaviors (orange), partnership and community capacity (purple), and social determinants (green).

Based on this preliminary work by the community partnerships, this section ties together the behavior over time graphs, the participants’ stories and dialogue, and feedback loops from the causal loop diagrams to understand the common behaviors of systems affecting health across communities and to stimulate greater conversation related to an HKHC theory of change, including places to intervene in the system and opportunities to reinforce what is working.

Participants’ causal loop diagrams included a total of 2,399 variables extracted from the transcripts for the behavior over time graph and causal loop diagram exercises; this represented a total of 227 unique variables across all community partnerships. The most common variables and a sample of feedback loops for each of the five subsystems are outlined next.

Figure 12: Healthy Kids, Healthy Communities Synthesized Causal Loop Diagram



Active living policies and environments

For the active living policies and environments subsystem, a total of 30 different variables were identified. Of these, Table 16 summarizes variables represented in at least 20% of the community partnerships' CLDs. Other variables with the number of associated community partnerships included: Safe Routes to School (9), joint use agreements (7), open/ green space/ natural resources (7), neighborhood connectivity (6), automobile-oriented development (6), traffic volume/ speed (6), busing kids to school (6), quality of the built environment (5), pedestrian/ bike safety (4), affordability of public transportation (4), affordability of bikes (3), amenities – trees, water fountains, street lights (3), school recreation facilities (2), affordability of driving (2), transit-oriented development (1), and distance to destinations (1).

Table 16: Active Living Policies & Environments

CLD Variables	# (%) of Community Partnerships
Access to parks	41 (83.7%)
Access to recreation facilities	40 (81.6%)
Access to pedestrian/ bike infrastructure	39 (79.6%)
Schools/ child care/ afterschool programs' PE, recess, and physical activity policies	36 (73.5%)
Access to public transportation	27 (55.1%)
Active living policy adoption and enforcement	25 (51.0%)
Urban sprawl	19 (38.8%)
Trails/ greenways/ gulches	18 (36.7%)
Schools in neighborhoods	17 (34.7%)
Traffic safety/ traffic calming/ quality of streets	15 (30.6%)
Car ownership/ dependence	13 (26.5%)
Healthy community design/ land use/ smart growth/ new urbanism	12 (24.5%)
Complete streets	12 (24.5%)
Maintenance of active living facilities	11 (22.4%)

An example feedback loop representing variables in the synthesized CLD is as follows:

Safe and quality parks and recreation facilities loop: Safe & Quality Parks & Rec Facilities → Outdoor Play/ Recreation → Community/ Youth Engagement & Organizing → Civic Engagement/ Voting/ Collaborative Decision-Making → Agency/ Organization/ Community Collaboration → Healthy Eating & Active Living Funds/ Resources → Safe & Quality Parks & Rec Facilities

A total of 1,555 feedback loops incorporate safe and quality parks and recreation facilities. This example is a reinforcing loop, and the notation in the feedback loop (see Figure 12) identifies it as a reinforcing loop (i.e., all "+" signs). The words represent variables of quantities that increase and decrease, and these variables change over time and are influenced by other variables as indicated by the arrows. Each arrow represents a causal relationship, and the plus and minus signs on the arrows indicate whether or not the influence of one variable on another variable (1) increases/adds to (plus or "+" sign), or (2) decreases/removes from the other variable (minus or "-" sign). These signs are referred to as polarities. In a reinforcing loop, the effect of an increase or decrease in a variable continues through the cycle and returns an increase or decrease to the same variable, respectively.

Looking specifically at the "+" or "-" notation, a feedback loop that has zero or an even number of "-" signs, or polarities in the loop, is considered a reinforcing loop. Balancing loops, with an odd number of

"-" signs, are another type of feedback loop referenced in one of the next examples. It is important to remember that this reinforcing loop is only one part of the larger CLD (see Figure 12), and the other loops and causal relationships can have an impact on the variables in this loop.

In isolation, this reinforcing loop can represents a virtuous cycle when all of these assets positively support one another, or a vicious cycle as challenges in one variable tend to perpetuate a downward spiral in the other variables. Yet, these influences likely level off at some point when the area is, for example, saturated with safe and quality parks and recreation facilities.

Healthy eating policies and environments

In the healthy eating policies and environments subsystem, a total of 48 different variables were identified. Of these, Table 17 summarizes variables represented in at least 20% of the community partnerships' CLDs. Other variables with the number of associated community partnerships included: healthy vending/ concessions (8), food desert/ food insecurity (8), food distribution/ exportation (8), healthy restaurants (7), healthy food/ beverage marketing/ advertising (6), food banks/ pantries (5), access to sugar sweetened beverages (5), sugar sweetened beverage policies (4), farm to school (3), affordability of unhealthy foods/ beverages (3), affordability of fruits/ vegetables (3), unhealthy food/ beverage taxes/ portion control policies/ zoning for unhealthy vendors (3), unhealthy vending/ concessions (3), space for home gardens (3), access to fruits/ vegetables (2), government subsidies for local produce (2), food processing infrastructure (2), menu labeling (2), unhealthy/ processed foods/ beverages in schools (2), fundraising in schools with unhealthy foods/ beverages (1), access to potable water (1), unhealthy food/ beverage vendors (1), community kitchens (1), sugar sweetened beverages in child care (1), targeted food/ beverage marketing to kids (1), targeted food/ beverage marketing to people in poverty (1),healthy product placement (1), and affordability of drinking water (1).

Table 17: Healthy Eating Policies & Environments

CLD Variables	# (%) of Community Partnerships
Access to healthy foods/ beverages	44 (89.8%)
Fast food restaurants	36 (73.5%)
Community gardens/ small farms/ CSAs/ Co-ops	35 (71.4%)
Affordability of healthy foods/ beverages	35 (71.4%)
Healthy foods/ beverages in schools (preparation of meals)	34 (69.4%)
Farmers' markets/ mobile markets/ produce stands	33 (67.3%)
Government nutrition assistance (SNAP, WIC, CACFP)	27 (55.1%)
Healthy eating policy adoption and enforcement	26 (53.1%)
Local food production (organic, sustainable farming)	26 (53.1%)
Corner/ convenience stores	24 (49.0%)
Neighborhood grocery stores (including ethnic stores)	23 (46.9%)
Agribusiness/ corporatization of farming	17 (34.7%)
Unhealthy food/ beverage marketing/ advertising	17 (34.7%)
Access to unhealthy foods/ beverages	17 (34.7%)
Government subsidized agriculture (commodities, pesticides, hormones)	16 (32.7%)
School gardens	12 (24.5%)
Zoning for urban agriculture/ produce sales	12 (24.5%)
Healthy food/ beverage retail	10 (20.4%)
"Big box"/ chain/ franchised stores	10 (20.4%)
Healthy foods/ beverages in child care	10 (20.4%)

An example feedback loop representing variables in the synthesized CLD is as follows:

Access to healthy foods and beverages loop: Access to Healthy Foods & Beverages → Purchase/ Consumption of Healthy Foods/ Beverages → Childhood Obesity → Community/ Youth Advocacy → Political Will → Socially & Environmentally Responsible Policies → Crime & Violence (Bullying) → Local Economy (Revenue) → Healthy Eating & Active Living Funds/ Resources → Neighborhood Grocery Stores (Incl. Ethnic Stores) → Access to Healthy Foods & Beverages

Over 30,0000 feedback loops incorporate access to healthy foods and beverages. This example is a balancing loop, and the notation in the feedback loop (see Figure 12) identifies it as a balancing loop (i.e., three "-" signs). In a balancing loop, the effects of the variables tend to create more of a stable trend over time, as opposed to one that is continually increasing or decreasing. This effect continues through the cycle and returns a stabilizing influence to the original variable, respectively.

In Figure 12, this loop is disconnected (e.g., the connection from childhood obesity to community and youth advocacy is not a direct connection). In order to prevent loops from crossing over other loops, these figures use shadow variables to keep the image from getting too messy. Childhood obesity has a shadow variable (shown in Figure 12) and it is presented in gray text with brackets on either side to show that it "shadows," or duplicates, the original variable.

Partnership and community capacity

With respect to the partnership and community capacity subsystem, a total of 27 different variables were identified. Of these, Table 18 summarizes variables represented in at least 20% of the community partnerships' CLDs. Other variables with the number of associated community partnerships included: community/ school role models (9), healthy eating and active living social norms (7), trust (6), cultural competence/ relevance (6), neighborhood associations (3), non-competitive sports (3), food policy council influence (2), nature/ ecosystem education (2), healthy eating and active living assessment (1), and social capital (1).

Table 18: Partnership and Community Capacity

CLD Variables	# (%) of Community Partnerships
Political will/ public demand/ priorities/ attitudes	35 (71.4%)
Community/ parent/ employer/ school engagement/ organizing	34 (69.4%)
Health education/ promotion/ knowledge/ awareness	33 (67.3%)
Partnership and collaboration	31 (63.3%)
Support from policy- and decision-makers	28 (57.1%)
Organized sports and recreation programs	23 (46.9%)
Sense of community/ cohesion/ integration	22 (44.9%)
Active living programs/ promotions	22 (44.9%)
Advocacy	21 (42.9%)
Civic engagement/ voting/ collaborative decision-making	16 (32.7%)
Community empowerment/ capacity/ pride	14 (28.6%)
Nutrition education	14 (28.6%)
Youth engagement/ champions	13 (26.5%)
Healthy eating programs/ promotions	13 (26.5%)
Healthy eating and active living campaigns/ media	13 (26.5%)
Affordability of recreation programs	13 (26.5%)
Community leadership/ champions	12 (24.5%)

An example feedback loop representing variables in the synthesized CLD is as follows:

Political will loop: Political Will → Civic Engagement/ Voting/ Collaborative Decision-Making → Community Empowerment/ Capacity/ Pride → Community/ Youth Engagement & Organizing → Community/ Youth Advocacy → Political Will

Over 30,0000 feedback loops incorporate political will. This example is a reinforcing loop, and the notation in the feedback loop (see Figure 12) identifies it as a reinforcing loop (i.e., all "+" signs). In this case, political will increases civic engagement, and, in turn, community empowerment increases. Consequently, community empowerment increases community and youth engagement and organizing that increases advocacy and further increases political will (virtuous cycle). Unfortunately, the opposite is true in communities that lack political will (vicious cycle).

Social determinants of health

With respect to the partnership and community capacity subsystem, a total of 82 different variables were identified. Of these, Table 19 summarizes variables represented in at least 20% of the community partnerships' CLDs. Other variables with the number of associated community partnerships included: crime prevention/ law enforcement/ neighborhood watch (9), affordability of insurance – health, home, and car (9), staff and resources (9), blight/ abandoned buildings/ vacant lots (8), income/ access to capital (8), gentrification/ displacement/ people leaving the community (8), pollution/ trash/ litter (7), self-image/ identity/ esteem/ reliance/ life skills (7), parents' time for meal preparation (7), affordability of health care (6), population density (6), access to quality child care/ after school programs (5), immigrants/ people without citizenship (5), gang members (5), sense of hope/ hopelessness (5), parents as role models (5), affordability of liability (5), leisure time (5), property taxes (4), individualism/ consumerism (4), private/ non-governmental organization investment (4), community representation (3), income inequality (3), time for volunteerism (3), incarcerated people (3), fear-inducing media (3), stray dogs (3), home ownership/ maintenance (3), language justice – translation/ interpretation (3), fear of deportation (2), peer pressure (2), income spent on food (2), tourism (2), density of adult-oriented businesses (2), vacant lot restoration (2), minority-owned businesses (2), incentives for small businesses (2), social isolation (2), women in agriculture (2), child problem solving/ conflict management skills (2), parents' time working (2), parents' time commuting (2), value of kids (1), intersectionality -- "isms" (1), migrant camps (1), equitable immigration policies (1), school performance (1), teasing (1), economic power – community and residents (1), economic power – corporations and industry (1), media coverage of affluent, non-marginalized populations (1), community/ parent influence on social policy (1), longer-term residents (1), exposure to pesticides and chemicals (1), affordability of vacant lot restoration (1), greed (1), resources/ support for small farmers (1), parental pressure to eat more (1), parental support for outdoor play due to safety and weather (1), grandparents raising grandchildren (1), illiteracy (1), and democracy (1).

Table 19: Social Determinants of Health

CLD Variables	**# (%) of Community Partnerships**
Healthy eating and active living funding	45 (91.8%)
Safety/ perceptions of safety	44 (89.8%)
Employment/ local businesses/ livable wages	38 (77.6%)
Crime and violence (bullying)	33 (67.3%)
Poverty/ homeless	29 (59.2%)
Local economy/ economic climate/ city budget and revenue	27 (55.1%)
Family time together/ parents' time with children	24 (49.0%)
Academic curriculum/ standardized testing	17 (34.7%)

Table 19: Social Determinants of Health (continued)	
CLD Variables	**# (%) of Community Partnerships**
Educational attainment/ academic performance	17 (34.7%)
Education/ vocational training	16 (32.7%)
Tax base (state or local)	15 (30.6%)
Price/ cost of gas	14 (28.6%)
Affordable, healthy housing/ neighborhood environments	14 (28.6%)
Economic development	12 (24.5%)
Racism/ discrimination/ segregation	11 (22.4%)
Air, water, and soil quality	11 (22.4%)
Access to health care (including dental)	11 (22.4%)
School/ child care funding/ revenue	10 (20.4%)
Socially and environmentally responsible policies (recycling, health in all policies, equitable resource distribution)	10 (20.4%)

An example feedback loop representing variables in the synthesized CLD is as follows:

Healthy eating and active living funding loop: Healthy Eating & Active Living Funds/ Resources → Farmers' Markets/ Mobile Markets/ Produce Stands → School & Community Gardens/ Urban Agriculture → Demand for Healthy Foods & Beverages → Agribusiness/ Corporatization of Farming → Local Economy (Revenue) → Healthy Eating & Active Living Funds/ Resources

Over 30,0000 feedback loops incorporate healthy eating and active living funding. This example is a balancing loop, and the notation in the feedback loop (see Figure 12) identifies it as a balancing loop (i.e., one "-" signs). In this case, funding increases farmers' markets, which can increase urban agriculture. With more people gardening or working on urban farms, the demand for healthy foods and beverages increases. Subsequently, with more demand for these local sources of food production, the dependence on agribusiness and the corporatization of farming decreases. Because many of these businesses make contributions to support the local economy (e.g., paying taxes, offering sponsorships), this decrease in agribusiness may also result in a decrease in local revenue and fewer funds to allocate back to healthy eating and active living initiatives. Again, the reverse is true if there are no healthy eating or active living funds at the start.

Health and health behaviors

For the health and health behaviors subsystem, a total of 40 different variables were identified. Of these, Table 20 summarizes variables represented in at least 20% of the community partnerships' CLDs. Other variables with the number of associated community partnerships included: health and quality of life (9), purchase of unhealthy foods/ beverages (8), participation in sports/ recreation (8), mental/ social/ emotional health/ development (7), stress (7), breastfeeding (7), injuries and fatalities (6), use of public transportation (5), eating at home/ as family (4), consumption of large portions (4), alcohol/ tobacco/ substance use (4), health disparities (3), consumption of locally grown foods/ beverages (2), consumption of sugar sweetened beverages (2), health care utilization/ ER visits (2), prescription medications (2), children underweight/ malnourished (2), people with health insurance (1), ability status/ mobility (1), disparities in injuries/ fatalities (1), adolescent eating disorders (1), use of government nutrition assistance (1), caffeine addiction (1), water consumption (1), and participation in free health clinics (1).

Table 20: Health and Health Behaviors	
CLD Variables	**# (%) of Community Partnerships**
Physical activity	47 (95.9%)
Active transportation (walking/ biking)	38 (77.6%)
Sedentary/ screen time/ technology	34 (69.4%)
Outside play/ use of recreation facilities	33 (67.3%)
Overweight and obesity	28 (57.1%)
Consumption of healthy foods/ beverages	28 (57.1%)
Healthy food preparation/ cooking at home	26 (53.1%)
Consumption of unhealthy foods/ beverages	25 (51.0%)
Chronic diseases (and symptoms)	20 (40.8%)
Healthy eating	20 (40.8%)
Childhood overweight and obesity	17 (34.7%)
Car use/ driving	14 (28.6%)
Free, unstructured play/ recreation	11 (22.4%)
Walk/ bike to school	11 (22.4%)
Purchase of healthy foods/ beverages	11 (22.4%)

An example feedback loop representing variables in the synthesized CLD is as follows:

Physical activity loop: Physical Activity → Childhood Obesity → Community/ Youth Advocacy → Agency/ Organization/ Community Collaboration → School/ Child Care/ After School Funding/ Revenue → School/ Child Care/ After School Physical Activity Standards → Organized Sports & Recreation Programs → Physical Activity

Over 30,000 feedback loops incorporate physical activity. This final example is also a balancing loop, and the notation in the feedback loop (see Figure 12) identifies it as a balancing loop (i.e., one "-" signs). With more physical activity, there is less childhood obesity, and, therefore, less community and youth advocacy associated with childhood obesity. As advocacy diminishes, there is less collaboration of agencies, organizations, and community members to address childhood obesity. In turn, school partners are less inclined to allocate their limited funds and resources to improving physical activity standards, including implementation of new or revised standards. Consequently, there may be fewer school resources available to support a wide range of organized sports and recreation programs, offering students less opportunities to be physically active. Once more, the opposite set of circumstances unfolds in communities where there is less physical activity and more childhood obesity.

Cross-Site Strategy: Corner Stores

Characteristics of policy, practice, and environmental changes in corner stores

Across the 49 community partnerships, a total of 82 policy, practice, or environmental changes for corner stores occurred over the course of the HKHC initiative. Of these, only one dissolved by the time of the follow-up evaluation and only two did not appear in the community partnerships' work plans.

In addition to the characteristics provided in Table 21, community partnerships also had costs related to staff and volunteers (mostly low - 70%), space and infrastructure (mostly low - 82%), and equipment and materials (low – 55% - to moderate – 37%). The corner stores varied considerably in size from 540 to 53,420 square feet and in annual hours of operation from 1,976 to 8,736. And, most of the strategies were designed to affect consumers' healthy eating (49%), with some affecting intervention delivery or sustainability (32%) and others affecting consumers' knowledge, skills, or attitudes (20%).

Table 21: Policy, practice, or environmental changes in corner stores (n = 82)

Characteristic	Number (%) of total
Policy changes	5 (6%)
Practice changes	18 (22%)
Environmental changes	59 (72%)
New changes	76 (93%)
Modifications	5 (6%)
2008-9 grant year	17 (21%)
2009-10 grant year	29 (35%)
2010-11 grant year	16 (20%)
2011-12 grant year	17 (21%)
2012-13 grant year	3 (4%)
Applicability to populations in poverty	28 (34%)
Applicability to the general population	54 (66%)
Policy or practice adoption	16 (20%)
Fund allocation	0
Implementation	42 (51%)
Enforcement or maintenance	24 (29%)
High quality implementation	64 (78%)
Low quality implementation	18 (22%)
Unidirectional, little community input	20 (24%)
Some bidirectional participation	54 (66%)
Full bidirectional, shared decisions	8 (10%)

Scale, implementation, and dose

To understand the scale of the policy, practice, and environmental changes in corner stores, evaluators calculated values associated with the following two formulas:

- **Scale (general population)** = Size (square feet) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (general population)

- **Scale (high-risk population)** = Size (square feet) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (high-risk populations)

Policies or practices affecting multiple corner stores in a geographic area (level 1) automatically received a score of 100. All other policies, practices, or environmental changes at the store level (2) or within store level (3) tended to range between 0 and 1. Level 1 changes represented approximately 10% of the changes, level 2 also represented about 10%, and level 3 reflected the remaining 80% of changes.

For implementation, evaluators developed and applied the following formula to the policy, practice, or

environmental changes in corner stores:

- **Implementation** = Stage (adoption, fund allocation, implementation, enforcement/ maintenance) X State (partial or full completion) X Quality of implementation (high or low) X Inclusiveness of community residents (unidirectional to bidirectional)

Again, the implementation scores ranged from 0 to 1 for each policy, practice, or environmental change, with a mean score of 0.42.

Finally, evaluators assessed dose of each intervention strategy in the following formulas:

- **Dose (general population)** = Scale (general population) X Implementation

- **Dose (high-risk population)** = Scale (high-risk population) X Implementation

The resulting scores for both dose formulas ranged from 0 to 16.5. This represents an initial attempt to quantify these characteristics in order to test assumptions that higher intervention doses alongside greater general and high-risk population reach result in increased population impact (see further data analyses in the HKHC evaluation supplement in the Journal of Public Health Management and Practice).

Cross-Site Strategy: Farmers' Markets

Characteristics of policy, practice, and environmental changes in farmers' markets

Across the 49 community partnerships, a total of 231 policy, practice, or environmental changes for farmers' markets occurred over the course of the HKHC initiative. Of these, four dissolved by the time of the follow-up evaluation, one was partially completed, and one did not appear in the community partnerships' work plans.

In addition to the characteristics provided in Table 22, community partnerships also had costs related to staff and volunteers (low – 58% - to moderate – 30%), space and infrastructure (mostly low - 93%), and equipment and materials (mostly low – 83%). The farmers' markets varied considerably in the number of vendors from 1 to 78 and in annual hours of operation from 9 to 3,406. And, nearly half of the strategies were designed to affect consumers' healthy eating (47%), with the majority affecting intervention delivery or sustainability (52%) and a few affecting consumers' knowledge, skills, or attitudes (1%).

Table 22: Policy, practice, or environmental changes in farmers' markets (n = 231)

Characteristic	Number (%) of total
Policy changes	26 (11%)
Practice changes	69 (30%)
Environmental changes	136 (59%)
New changes	220 (95%)
Modifications	11 (5%)
2008-9 grant year	16 (7%)
2009-10 grant year	31 (13%)
2010-11 grant year	86 (37%)
2011-12 grant year	69 (30%)
2012-13 grant year	27 (12%)
Applicability to populations in poverty	129 (56%)
Applicability to the general population	102 (44%)
Policy or practice adoption	60 (26%)
Fund allocation	1 (< 1%)
Implementation	162 (70%)
Enforcement or maintenance	8 (4%)
High quality implementation	223 (97%)
Low quality implementation	8 (3%)
Unidirectional, little community input	58 (25%)
Some bidirectional participation	129 (56%)
Full bidirectional, shared decisions	44 (19%)

Scale, implementation, and dose

To understand the scale of the policy, practice, and environmental changes in farmers' markets, evaluators calculated values associated with the following two formulas:

- **Scale (general population)** = Size (number of vendors) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (general population)

- **Scale (high-risk population)** = Size (number of vendors) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (high-risk populations)

Policies or practices affecting multiple farmers' markets in a geographic area (level 1) automatically received a score of 100. All other policies, practices, or environmental changes at the market level (2) or within market level (3) tended to range between 0 and 1. Level 1 changes represented approximately 4% of the changes, level 2 represented 64%, and level 3 reflected the remaining 32% of changes.

For implementation, evaluators developed and applied the following formula to the policy, practice, or

environmental changes in farmers' markets:

- **Implementation** = Stage (adoption, fund allocation, implementation, enforcement/ maintenance) X State (partial or full completion) X Quality of implementation (high or low) X Inclusiveness of community residents (unidirectional to bidirectional)

Again, the implementation scores ranged from 0 to 1 for each policy, practice, or environmental change, with a mean score of 0.40.

Finally, evaluators assessed dose of each intervention strategy in the following formulas:

- **Dose (general population)** = Scale (general population) X Implementation

- **Dose (high-risk population)** = Scale (high-risk population) X Implementation

The resulting scores for both dose formulas ranged from 0 to 16.5. This represents an initial attempt to quantify these characteristics in order to test assumptions that higher intervention doses alongside greater general and high-risk population reach result in increased population impact (see further data analyses in the HKHC evaluation supplement in the Journal of Public Health Management and Practice).

Cross-Site Strategy: Child Care Nutrition Standards

Characteristics of policy, practice, and environmental changes related to nutrition standards in child care settings

Across the 49 community partnerships, a total of 530 policy, practice, or environmental changes related to nutrition standards in child care settings occurred over the course of the HKHC initiative. Of these, 16 were still underway and all of them appeared in the community partnerships' work plans.

Table 23: Nutrition-related policy, practice, or environmental changes in child care (n = 530)

Characteristic	Number (%) of total
Policy changes	444 (84%)
Practice changes	85 (16%)
Environmental changes	1 (< 1%)
New changes	371 (70%)
Modifications	158 (30%)
2008-9 grant year	1 (< 1%)
2009-10 grant year	10 (2%)
2010-11 grant year	201 (38%)
2011-12 grant year	165 (31%)
2012-13 grant year	138 (26%)
Applicability to children	530 (100%)
Applicability to populations in poverty	10 (2%)
Policy or practice adoption	481 (91%)
Fund allocation	0
Implementation	39 (7%)
Enforcement or maintenance	10 (2%)
High quality implementation	529 (99%)
Low quality implementation	1 (< 1%)
Unidirectional, little community input	198 (37%)
Some bidirectional participation	329 (62%)
Full bidirectional, shared decisions	3 (< 1%)

In addition to the characteristics provided in Table 23, community partnerships also had costs related to staff and volunteers (mostly low - 87%), space and infrastructure (low – 51% - to moderate – 49%), and equipment and materials (some high – 34%- and some low – 50%). The child care settings varied considerably in the number of staff from 1 to 200 and in annual hours of operation from 540 to 4,992. And, the vast majority of the strategies were designed to affect children's healthy eating (87%), with some affecting intervention delivery or sustainability (3%) and some affecting consumers' knowledge, skills, or attitudes (3%).

Scale, implementation, and dose

To understand the scale of the policy, practice, and environmental changes related to nutrition standards in child care, evaluators calculated values associated with the following two formulas:

- **Scale (general population)** = Size (number of staff) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (general population)

- **Scale (high-risk population)** = Size (number of staff) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (high-risk populations)

Policies or practices affecting multiple child care agencies or centers in a geographic area (level 1) automatically received a score of 100. All other policies, practices, or environmental changes at the agency level (2) or within agency level (3) tended to range between 0 and 1. Level 1 changes represented approximately 8% of the changes, level 2 represented 57%, and level 3 reflected the

remaining 35% of changes.

For implementation, evaluators developed and applied the following formula to the policy, practice, or environmental changes related to nutrition standards in child care:

- **Implementation** = Stage (adoption, fund allocation, implementation, enforcement/ maintenance) X State (partial or full completion) X Quality of implementation (high or low) X Inclusiveness of community residents (unidirectional to bidirectional)

Again, the implementation scores ranged from 0 to 1 for each policy, practice, or environmental change, with a mean score of 0.17.

Finally, evaluators assessed dose of each intervention strategy in the following formulas:

- **Dose (general population)** = Scale (general population) X Implementation

- **Dose (high-risk population)** = Scale (high-risk population) X Implementation

The resulting scores for both dose formulas ranged from 0 to 49.5. This represents an initial attempt to quantify these characteristics in order to test assumptions that higher intervention doses alongside greater general and high-risk population reach result in increased population impact (see further data analyses in the HKHC evaluation supplement in the Journal of Public Health Management and Practice).

Cross-Site Strategy: Child Care Physical Activity Standards

Characteristics of policy, practice, and environmental changes related to physical activity standards in child care settings

Across the 49 community partnerships, a total of 419 policy, practice, or environmental changes related to physical activity standards in child care settings occurred over the course of the HKHC initiative. Of these, 13 were still underway and all of them appeared in the community partnerships' work plans.

Table 24: Physical Activity-related policy, practice, or environmental changes in child care (n = 419)

Characteristic	Number (%) of total
Policy changes	300 (72%)
Practice changes	84 (20%)
Environmental changes	35 (8%)
New changes	341 (81%)
Modifications	77 (18%)
2008-9 grant year	0 (0%)
2009-10 grant year	11 (3%)
2010-11 grant year	200 (48%)
2011-12 grant year	79 (19%)
2012-13 grant year	144 (27%)
Applicability to populations in poverty	10 (2%)
Applicability to the general population	417 (99%)
Policy or practice adoption	334 (80%)
Fund allocation	0 (0%)
Implementation	74 (18%)
Enforcement or maintenance	11 (3%)
High quality implementation	223 (97%)
Low quality implementation	8 (3%)
Unidirectional, little community input	94 (22%)
Some bidirectional participation	324 (77%)
Full bidirectional, shared decisions	1 (<1%)

In addition to the characteristics provided in Table 24, community partnerships also had costs related to staff and volunteers (low – 16% to moderate – 84%), space and infrastructure (low – 37% to moderate – 63%), and equipment and materials (high – 43% to low – 37%). The child care sites varied considerably in the number of staff from 1 to 40 and in annual hours of operation from 540 to 4,375. And, the majority of the strategies were designed to affect consumers' healthy eating (89%), with the some affecting intervention delivery or sustainability (10%) and a few affecting consumers' knowledge, skills, or attitudes (1%).

Scale, implementation, and dose

To understand the scale of the policy, practice, and environmental changes related to physical activity standards in child care, evaluators calculated values associated with the following two formulas:

- **Scale (general population)** = Size (number of staff) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (general population)

- **Scale (high-risk population)** = Size (number of staff) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (high-risk populations)

Policies or practices affecting multiple child care agencies in a geographic area (level 1) automatically received a score of 100. All other policies, practices, or environmental changes at the agency level (2) or within agency level (3) tended to range between 0 and 1. Level 1 changes represented approximately 10% of the changes, level 2 represented 79%, and level 3 reflected the remaining 11%

of changes.

For implementation, evaluators developed and applied the following formula to the policy, practice, or environmental changes in child care settings:

- **Implementation** = Stage (adoption, fund allocation, implementation, enforcement/ maintenance) X State (partial or full completion) X Quality of implementation (high or low) X Inclusiveness of community residents (unidirectional to bidirectional)

Again, the implementation scores ranged from 0 to .66 for each policy, practice, or environmental change, with a mean score of 0.20.

Finally, evaluators assessed dose of each intervention strategy in the following formulas:

- **Dose (general population)** = Scale (general population) X Implementation

- **Dose (high-risk population)** = Scale (high-risk population) X Implementation

The resulting scores for both dose formulas ranged from 0 to 66. This represents an initial attempt to quantify these characteristics in order to test assumptions that higher intervention doses alongside greater general and high-risk population reach result in increased population impact (see further data analyses in the HKHC evaluation supplement in the Journal of Public Health Management and Practice).

Cross-Site Strategy: Active Transportation

Characteristics of policy, practice, and environmental changes in active transportation settings

Across the 49 community partnerships, a total of 315 policy, practice, or environmental changes related to active transportation settings (e.g., streets) occurred over the course of the HKHC initiative. Of these, two were still underway and four of them did not appear in the community partnerships' work plans.

In addition to the characteristics provided in Table 25, community partnerships also had costs related to staff and volunteers (low – 26%, moderate – 31%, and high – 18%), space and infrastructure (low - 38%, moderate – 14%, and high – 22%), and equipment and materials (mostly low – 55%). The active transportation settings varied considerably in length from 36 to 4,464,900 feet. And, over half of the strategies were designed to affect consumers' active living (53%), with a large proportion affecting intervention delivery or sustainability (43%) and a few affecting consumers' knowledge, skills, or attitudes (4%).

Table 25: Policy, practice, or environmental changes in active transportation settings (n = 315)

Characteristic	Number (%) of total
Policy changes	75 (24%)
Practice changes	23 (7%)
Environmental changes	217 (69%)
New changes	226 (72%)
Modifications	89 (28%)
2008-9 grant year	7 (2%)
2009-10 grant year	30 (10%)
2010-11 grant year	72 (23%)
2011-12 grant year	98 (31%)
2012-13 grant year	102 (33%)
Applicability to populations in poverty	1 (1%)
Applicability to the general population	278 (88%)
Policy or practice adoption	87 (28%)
Fund allocation	9 (3%)
Implementation	216 (69%)
Enforcement or maintenance	3 (1%)
High quality implementation	223 (97%)
Low quality implementation	8 (3%)
Unidirectional, little community input	66 (21%)
Some bidirectional participation	221 (70%)
Full bidirectional, shared decisions	28 (9%)

Scale, implementation, and dose

To understand the scale of the policy, practice, and environmental changes in active transportation settings, evaluators calculated values associated with the following two formulas:

- **Scale (general population)** = Size (feet) X Effect on health behavior (direct or indirect) X Applicability (general population)

- **Scale (high-risk population)** = Size (feet) X Effect on health behavior (direct or indirect) X Applicability (high-risk populations)

Policies or practices affecting multiple transportation settings in a geographic area (level 1) automatically received a score of 100. All other policies, practices, or environmental changes at the street level (2) or within street level (3) tended to range between 0 and 1. Level 1 changes represented approximately 26% of the changes, level 2 represented 38%, and level 3 reflected the remaining 36% of changes.

For implementation, evaluators developed and applied the following formula to the policy, practice, or

environmental changes in active transportation settings:

- **Implementation** = Stage (adoption, fund allocation, implementation, enforcement/ maintenance) X State (partial or full completion) X Quality of implementation (high or low) X Inclusiveness of community residents (unidirectional to bidirectional)

Again, the implementation scores ranged from 0 to 1 for each policy, practice, or environmental change, with a mean score of 0.35.

Finally, evaluators assessed dose of each intervention strategy in the following formulas:

- **Dose (general population)** = Scale (general population) X Implementation

- **Dose (high-risk population)** = Scale (high-risk population) X Implementation

The resulting scores for both dose formulas ranged from 0 to 49.5. This represents an initial attempt to quantify these characteristics in order to test assumptions that higher intervention doses alongside greater general and high-risk population reach result in increased population impact (see further data analyses in the HKHC evaluation supplement in the Journal of Public Health Management and Practice).

Cross-Site Strategy: Parks and Play Spaces

Characteristics of policy, practice, and environmental changes in parks and play spaces

Across the 49 community partnerships, a total of 167 policy, practice, or environmental changes for parks and play spaces occurred over the course of the HKHC initiative. Of these, two were partially completed and three did not appear in the community partnerships' work plans.

In addition to the characteristics provided in Table 26, community partnerships also had costs related to staff and volunteers (high – 34% - to moderate – 36%), space and infrastructure (split into low - 38%, moderate – 23%, and high – 29%), and equipment and materials (mostly low – 51%). The parks and play spaces varied considerably in size from 200 to 20,865,240 square feet and in annual hours of operation from 416 to 78,624. And, almost two-thirds of the strategies were designed to affect residents' physical activity (65%), with a handful affecting intervention delivery or sustainability (17%) and some affecting consumers' knowledge, skills, or attitudes (18%).

Table 26: Policy, practice, or environmental changes in parks and play spaces (n = 167)

Characteristic	Number (%) of total
Policy changes	36 (22%)
Practice changes	7 (4%)
Environmental changes	123 (74%)
New changes	118 (71%)
Modifications	49 (29%)
2008-9 grant year	15 (9%)
2009-10 grant year	24 (14%)
2010-11 grant year	40 (24%)
2011-12 grant year	58 (35%)
2012-13 grant year	24 (14%)
Applicability to children	42 (25%)
Applicability to populations in poverty	6 (4%)
Applicability to the general population	121 (73%)
Policy or practice adoption	38 (23%)
Fund allocation	5 (3%)
Implementation	121 (73%)
Enforcement or maintenance	3 (2%)
High quality implementation	148 (89%)
Low quality implementation	19 (11)
Unidirectional, little community input	21 (13%)
Some bidirectional participation	67 (40%)
Full bidirectional, shared decisions	79 (47%)

Scale, implementation, and dose

To understand the scale of the policy, practice, and environmental changes in parks and play spaces, evaluators calculated values associated with the following two formulas:

- **Scale (general population)** = Size (square feet) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (general population)

- **Scale (high-risk population)** = Size (square feet) X Access (annual hours of operation) X Effect on health behavior (direct or indirect) X Applicability (high-risk populations)

Policies or practices affecting multiple parks and play spaces in a geographic area (level 1) automatically received a score of 100. All other policies, practices, or environmental changes at the park level (2) or within park level (3) tended to range between 0 and 1. Level 1 changes represented approximately 10% of the changes, level 2 represented 35%, and level 3 reflected the remaining 55% of changes.

For implementation, evaluators developed and applied the following formula to the policy, practice, or environmental changes in parks and play spaces:

- **Implementation** = Stage (adoption, fund allocation, implementation, enforcement/ maintenance) X State (partial or full completion) X Quality of implementation (high or low) X Inclusiveness of community residents (unidirectional to bidirectional)

Again, the implementation scores ranged from 0 to 1 for each policy, practice, or environmental change, with a mean score of 0.45.

Finally, evaluators assessed dose of each intervention strategy in the following formulas:

- **Dose (general population)** = Scale (general population) X Implementation

- **Dose (high-risk population)** = Scale (high-risk population) X Implementation

The resulting scores for both dose formulas ranged from 0 to 33. This represents an initial attempt to quantify these characteristics in order to test assumptions that higher intervention doses alongside greater general and high-risk population reach result in increased population impact (see further data analyses in the HKHC evaluation supplement in the Journal of Public Health Management and Practice).

Other Strategies: Healthy Eating and Active Living

Across the 49 community partnerships, a total of 439 policy, practice, or environmental changes related to other healthy eating and active living strategies occurred over the course of the HKHC initiative. Almost half of the other strategies were gardens, farms, greenhouses, and orchards (206), joint use agreements (31), and trails (38). See Table 27 for the counts by strategy.

Some of the strategies were in different settings including healthy vending with 23 actions. The settings included parks, private and public institutions or organizations, city buildings, and county fairgrounds. Likewise, joint use agreements took place in different settings, including schools, parks, and public and private institutions or organizations. Seven urban agriculture policies were passed to allow hens or chickens on residential property. Finally, there were 19 committees, councils, or task forces that were formed to provide support with decision-making for elected or appointed officials (e.g., Food Policy Councils).

Table 27: Other Strategies by Community Partnerships

Strategies	Counts (%)
Gardens	206 (47%)
Trail	38 (9%)
Joint Use	31 (7%)
Healthy Vending	23 (5%)
Committee/Task Forces	19 (4%)
Healthy Eating	14 (3%)
Land Use	14 (3%)
City/Comprehensive Plans	13 (3%)
Food Bank	13 (3%)
Restaurants	13 (3%)
Other	13 (3%)
Grocery Stores	11 (3%)
Organizational policies	10 (2%)
School Wellness	9 (2%)
Urban Agriculture	7 (2%)
Safety	2 (<1%)
Activity Bus	1(<1%)
New Staff Positions	1 (<1%)
Reimbursement	1 (<1%)

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